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An analysis of existing data on youth unemployment was used to (1) review the reasons for high and rising youth unemployment, (2) account for high youth unemployment in 1966, and (3) measure the importance of the various causes of rising youth unemployment. Summary findings included--(1) Relatively high rates of youth unemployment are to be expected even in years of low general unemployment because of the large amount of movement into and out of the labor force resulting from the extended period of education characteristic of the United States, (2) In 1966, between three-fifths and seven-eights of youth unemployment arose from inexperienced and reentering job seekers, (3) Rapid increases in the size of the youth labor force and the proportion enrolled in school has led to increased proportions of youth seeking part-time and summer jobs, (4) There is no evidence that employers have become more restrictive toward young job seekers, but they have become increasingly selective among youth, with the result that unemployment rates of the youngest age groups, nonwhites, and girls have increased more than others, and (5) Insufficient vocational guidance, lack of information, and the seasonal pattern of enrolled job seekers entering and leaving the labor force contribute to high frictional unemployment. High economic growth rates, modifications in minimum wage standards, and job creation are recommended to relieve youth unemployment. (ET)

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THE PROBLEM OF YOUTH UNEMPLOYMENT

by

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Abstract

The youth unemployment rate has always been high relative to the total unemployment rate in the United States, but since 1962 the youth rate has not decreased as much as might be expected from the decrease in the total rate. The social implications of high youth unemployment are well known.

The reasons that have been advanced for high and rising unemployment include the growth of the youth labor force, discrimination against youth, structural problems, the problems of entering and seasonal job seekers, and the high mobility of young workers.

In 1966, between three-fifths and seven-eighths of youth unemployment arose from inexperienced and reentering job seekers, in short, from frictional unemployment.

Because of insufficient vocational guidance, lack of information, and the seasonal pattern of entry to and exit from the labor force of enrolled job seekers, frictional unemployment is high and may explain the high levels of youth unemployment, and changes in the causes of frictional unemployment or in the populations sensitive to frictional unemployment may explain rising youth unemployment.

In recent years increases have occurred in the ratio of the youth unemployment rate to the total rate, the percentage of total unemployment made up of youth, and regressions of youth unemployment rates on prime age unemployment rates. The increase occurred largely after 1962,

and appears to be associated with rapid increases in the youth labor force. Other factors have also been important. The proportion of enrolled youth has increased and this has led to increased proportions of youth seeking part-time and summer jobs. The seasonal increase from January to June of the youth labor force has increased much more than the seasonal increase in employment with the result that the seasonal increase in unemployment has increased even more than that of the labor force.

There is no evidence that employers have become increasingly restrictive toward young job seekers. Youth employment has increased rapidly, but not as rapidly as the youth labor force. Even so, the proportion of youth in the total employment of most of the major occupation and industry groups has increased, suggesting no serious increase in discrimination against youth as a whole. The differential trends in youth unemployment rates, however, suggest that employers have become increasingly selective among youth, with the result that unemployment rates of the youngest age groups, nonwhites, and girls have increased more than the rates of older youth, whites, and boys.

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THE PROBLEM OF YOUTH UNEMPLOYMENT

I. Introduction

Youth unemployment reached crisis levels in the early 1960's, and during the sustained recovery from recession levels of general unemployment after 1961, youth unemployment remained high.[1] The rapid growth of the youth labor force after 1962 (which was predicted to continue into the 1970's), and persistent high youth unemployment rates led to increased public concern and action. Legislation improving vocational education, establishing the Job Corps and the Neighborhood Youth Corps, and amending the Manpower Development and Training Act (MDTA) to improve youth opportunities were all passed in the early 1960's.[2]

Enlightened concern began earlier than the 1960's, however, because the youth unemployment rate has always been high.[3] A worsening was predictable from the expected growth of the youth population. Nevertheless, MDTA was originally written to limit youth trainees to insignificant numbers and the Youth Employment bill was rejected. Time and again

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[1] By youth I mean primarily persons 16 to 19 years old, although the group 14 to 19 years old is often used because of data limitations. On occasion the group 20 to 24 years old is also considered.

[2] For a review of the programs see the President's Manpower Report 1966.

[3] See Sar A. Levitan, Youth Employment Act (Kalamazoo: W. E. Upjohn Institute for Employment Research, 1963).

Congress considered and rejected measures to extend Federal aid to education before finally adopting it.[4]

Concern for dropouts also began earlier,[5] but the problem of unemployment of enrolled youth received less attention than the dropout problem.[6]

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[4] The birth cohorts of the war and early postwar periods who entered the labor force in strength in the late 1950's and early 1960's were born in overcrowded maternity wards, grew up in the postwar housing shortage, were schooled in overcrowded double sessions, entered overcrowded colleges and labor markets, and now are being drafted to fight in an unpopular war. This is a singular example of social neglect of a set of perfectly predictable social problems. That many of the young people in these cohorts have profound doubts about the intelligence and right to authority of the older generations who were responsible for the persistent and repeated neglect is certainly understandable.

[5] See Seymour Wolfbein, "The Transition from School to Work: A Study of the School Leaver," Readings in Unemployment, Special Committee on Unemployment Problems, U.S. Senate (Washington: Government Printing Office, 1960), pp. 705-714.

[6] This was usually the result of attaching small importance to the income needs of youth, and of ignoring the role of youth employment in preparing youth for career employment. See, however, Albert Rees' perceptive comments in "The Measurement of Unemployment," in Studies in Unemployment, Special Committee on Unemployment Problems, U.S. Senate (Washington: Government Printing Office, 1960), p. 28.

The Problem

Until 1962, the problem of youth unemployment was one of high unemployment. In recession years the ratio of the youth unemployment rate to the total unemployment rate was high, but the ratio fell with recovery from recession. After 1962, the ratio rose rather than fell, and the problem of rising unemployment became more important. Youth unemployment reached a peak in 1963 and 1964 and has since abated slightly. Most recently, however, concern about unemployment of nonwhite youth has been pointed up by the Kerner Commission's characterization of the "typical rioter" as

> . . . a teenager or young adult, a lifelong resident of the city in which he rioted, a high school dropout; . . . somewhat better educated than his nonrioting Negro neighbor, and . . . usually underemployed or employed in a menial job. . . .[7]

The magnitude and incidence of youth unemployment are discussed in detail elsewhere and are treated only incidentally here. My purposes are (1) to review the reasons for high and rising youth unemployment (Part II); (2) to account for high youth unemployment in 1966 (Part III); and (3) to measure the importance of the various causes of rising youth unemployment (Part IV). Part V summarizes the findings, assesses the policy implications of high youth unemployment, and examines briefly the outlook for youth unemployment.

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[7] Report of the National Advisory Commission on Civil Disorders, SUM-16, March 3, 1968. The Commission judged that unemployment problems were, after police problems, the second most important cause of riots.

Summary of Findings

High youth unemployment during prosperous years has usually been viewed as a result of discrimination, legal restrictions on youth employment, legal minimum wages, layoffs resulting from low seniority, and the "floundering" of youths finding places in a competitive labor market by a trial and error process. Rising unemployment was attributed to the growth of "structural problems." Some of these were demand problems such as shrinkage or slow growth of demand for jobs which usually are filled by youths, minimum wages, or low levels of growth for industrial jobs; and other structural problems were supply problems, such as the rapid growth of the youth labor force and growing competition from part-time workers such as middle-aged women and older people. Moreover, it was believed that much of the growth of labor demand was for highly trained workers (such as engineers and medical workers) while the average quality of the out-of-school youth labor force was probably falling since many of the most intelligent and able youths were continuing schooling.

This analysis reaches findings that are in rather sharp contrast with much of the folklore of youth unemployment, although it confirms much of the previous work of professional economists.

First, it appears that relatively high rates of youth unemployment are to be expected in the United States even in years of low general unemployment because of the large amount of movement into and out of the labor force resulting from the extended period of education characteristic of the United States. In 1966, between three-fifths and seven-eighths of teenage unemployment was attributable to entry or reentry into the labor force. Quitting and layoff cause relatively little youth unemployment. Much of the entry and reentry was the result of students seeking part-time or summer work and was not once-and-for-all commitment to the labor market. In October, more than one-half of youth unemployment consists of students (mostly seeking part-time work), and in the summer the proportion is even higher.

Rising unemployment is concentrated in younger teenagers (most of whom are still enrolled) and among nonwhites. The increase in youth unemployment rates adjusted for changes in prime age unemployment rates during the 1960's has been greatest for girls. There is little evidence that employers have become less receptive to youth; rather they have become more selective among youth, preferring older to younger youth, and white to nonwhites. Youth today make up higher percentages of total occupational and industrial employment than in the 1950's, but youth are concentrated in the more slowly growing occupations and industries.

II. Functioning of the Youth Labor Market

The unemployment rates of youths are high relative to unemployment rates of adults even during periods of low general unemployment. The high unemployment rate of youth in the United States appears to be unique among industrialized countries. Youth rates in European countries are seldom much higher than the general rate.[8] In Europe, a very large proportion of youth leave school at a single age, 14 in Germany, or 15 or 16 in Great Britain. A very large proportion of these youths enter formal apprenticeships in which the employer commits himself to continue employment of the youth over a period of years and the youth commits himself to remain with the company for the period of the apprenticeship.[9] In addition, youth wage rates are substantially below adult rates making young workers more profitable than adults in many activities. The working student is rare in Europe, with the result that most job seekers seek full-time year-round jobs.

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8. See, for instance, the paper by James R. Wason, "Apprenticeship and Youth Employment in Western Europe: An Economic Study," in The Role of Apprenticeship in Manpower Development: United States and Western Europe, Vol. 3 of Selected Readings in Employment and Manpower, Subcommittee on Employment and Manpower, Committee on Labor and Public Welfare, U.S. Senate, 88th Congress, 2d Session, 1964, pp. 1275-1357.

9. A BLS study of 16 countries reported in "Labor Standards and Job Training in Foreign Countries," Monthly Labor Review (September, 1967), found the following: In Austria, 75 percent of those reaching work entry age, usually 15, have undergone apprenticeship training; in Denmark, about 45 percent of the 14 year old public school leavers take apprenticeship or some form of vocational training; in France, vocational training is compulsory if school is left before age 17; in Germany, 80 percent of those not continuing school past the usual school leaving age of 14 take vocational training or apprenticeship. Youth wages ranging from 10 to 72 percent of journeyman rates are paid in Belgium, Sweden, the United Kingdom, and France.

Alternative Explanations of High and Rising Youth Unemployment

A variety of explanations have been offered to explain high and rising youth unemployment. Among them are:

1. The "glut" of youth arising from the large post-World War II birth cohorts entering the labor force during the 1960's

This is an explanation for rising youth unemployment but will not explain the relatively high levels of unemployment experienced during the 1950's.

The increase in the youth labor force was made up largely of students who sought part-time and summer employment, especially in the early years of increasing labor force. Thus the "glut" brought with it a restricted kind of labor supply.

This explanation is examined in the section on the youth labor force.

2. Frictional unemployment arising from disorganization of the youth labor market

Because of insufficient vocational guidance, lack of information, and the seasonal pattern of entry to and exit from the labor force of enrolled job seekers., frictional unemployment is high and may explain the high levels of youth unemployment, and changes in the causes of frictional unemployment or in the populations sensitive to frictional unemployment may explain rising youth unemployment.

This explanation is examined in the sections on frictional unemployment, seasonal variation, the first job, dropouts and graduates, and occupational mobility.

3. Discrimination against youth

Discrimination can arise from several different causes:

a. "Unemployability" occurs when youth fail to meet hiring criteria such as education, race, or clean arrest and conviction records. High unemployment can result from exclusion of youth from consideration until something has changed conditions of employment or youth characteristics, and rising unemployment could result from rising educational or other requirements. This subject is treated in the section on discrimination.

b. Discrimination against youth because of lack of specific experience, the elimination of entry jobs for inexperienced workers, and the slow growth or shrinkage of jobs traditionally performed by youth might explain rising youth unemployment. This subject is treated in the section on discrimination.

c. Minimum wage legislation that prevents employers from paying wages corresponding to the low productivity of inexperienced youth might explain a high level of youth unemployment in periods during which the minimum wage increased relative to average youth wages, and a rise in the ratio of the minimum wage to average youth wages might explain rising unemployment. This is treated in the section on minimum wage effects.

The Youth Labor Force

The 16 to 19 year old population declined after 1947 because of the smaller birth cohorts of the 1930's (Table 1). The population continued to decline until 1951, and then increased, slowly until 1957, and then more rapidly. The increases were larger after 1962. The youth labor force followed a similar pattern, but with a lag, reaching a minimum in 1954 and increasing rapidly after 1958 (Table 2). The increases in population and labor force after 1957 were accompanied by marked increases in unemployment, particularly large increases occurring in 1958 and 1961, both of which were recession years (Table 3). Relatively high unemployment also occurred in 1949-50 and in 1954 which were also recession years. Thus one of the major causes of high youth unemployment is high general unemployment or inadequate aggregate demand.

The youth labor force increased less than the youth population during the period after 1953, which is to say that youth labor force participation rates declined (Table 4). Labor force participation rates were at a peak in 1951, a year of buoyant labor demand (and minimal youth unemployment) and at their lowest in 1964, a year of fairly high general prosperity, but of high youth unemployment. After 1964 the labor force participation rates increased sharply. Apparently, the unfavorable condition of the youth labor market has an adverse effect on labor force participation. This is investigated in more detail in the next section.

Unfavorable labor market conditions did not account for all of the decline, however. More important was the increase in teenage school enrollment (Table 5). Enrolled youth have much lower labor force participation rates than out-of-school youth, so that the rate would have

Table 1. Annual Average Noninstitutional Youth Population by Age and Sex, 1947-1967

Number in thousands

	Age 16-19			Age 16-17			Age 18-19		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1947	9,046	4,580	4,466	4,422	2,238	2,184	4,624	2,342	2,282
1948	8,353	4,481	4,372	4,324	2,187	2,137	4,529	2,294	2,235
1949	8,639	4,368	4,271	4,188	2,114	2,074	4,451	2,254	2,197
1950	8,464	4,280	4,184	4,108	2,075	2,033	4,356	2,205	2,151
1951	8,391	4,244	4,147	4,164	2,106	2,058	4,227	2,138	2,089
1952	8,431	4,269	4,162	4,288	2,174	2,114	4,143	2,095	2,048
1953	8,478	4,281	4,197	4,295	2,177	2,118	4,183	2,104	2,079
1954	8,662	4,384	4,278	4,386	4,224	2,162	4,276	2,160	2,116
1955	8,813	4,466	4,347	4,500	2,285	2,215	4,313	2,181	2,132
1956	8,953	4,534	4,419	4,556	2,312	2,244	4,397	2,222	2,175
1957	8,188	4,652	4,536	4,667	2,364	2,303	4,521	2,288	2,233
1958	9,515	4,815	4,700	4,936	2,499	2,437	4,597	2,316	2,263
1959	10,071	5,098	5,973	5,387	2,731	2,656	4,684	2,367	2,317
1960	10,592	5,362	5,230	5,618	2,850	2,768	4,974	2,512	2,462
1961	10,956	5,548	5,408	5,522	2,802	2,720	5,434	2,746	2,688
1962	11,142	5,633	5,509	5,551	2,812	2,739	5,591	2,821	2,770
1963	11,878	5,996	5,882	5,353	2,214	2,139	5,525	2,782	2,743
1964	12,621	6,368	6,253	7,026	3,554	3,472	5,595	2,814	2,781
1965	13,370	6,752	6,618	6,981	3,533	3,448	6,389	3,219	3,170
1966	14,039	7,097	7,942	6,960	3,524	3,436	6,079	3,573	3,506
1967	14,074	7,119	6,955	7,041	3,566	3,475	7,033	3,553	3,480

Source: Bureau of Labor Statistics

Table 2. Annual Average Youth Civilian Labor Force by Age and Sex, 1947-1967

	Number in Thousands								
	Age 16-19			Age 16-17			Age 18-19		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1947	4,323	2,488	1,835	1,750	1,106	643	2,573	1,382	1,192
1948	4,435	2,600	1,835	1,780	1,109	671	2,655	1,491	1,164
1949	4,289	2,477	1,811	1,704	1,056	648	2,585	1,421	1,163
1950	4,216	2,504	1,712	1,659	1,047	611	2,557	1,457	1,101
1951	4,105	2,346	1,757	1,743	1,080	662	2,362	1,266	1,095
1952	4,063	2,311	1,752	1,807	1,101	706	2,256	1,210	1,046
1953	4,026	2,319	1,706	1,726	1,070	656	2,300	1,249	1,050
1954	3,976	2,297	1,686	1,643	1,024	620	2,333	1,273	1,062
1955	4,093	2,369	1,724	1,711	1,070	641	2,382	1,299	1,083
1956	4,296	2,434	1,863	1,877	1,142	736	2,419	1,292	1,127
1957	4,276	2,417	1,860	1,843	1,127	716	2,433	1,290	1,144
1958	4,260	2,428	1,832	1,818	1,133	685	2,442	1,295	1,147
1959	4,492	2,598	1,896	1,971	1,207	765	2,521	1,391	1,131
1960	4,840	2,786	2,055	2,093	1,290	805	2,747	1,496	1,250
1961	4,935	2,793	2,142	1,984	1,210	774	2,951	1,583	1,368
1962	4,915	2,769	2,147	1,918	1,177	742	2,997	1,592	1,405
1963	5,138	2,907	2,231	2,171	1,321	850	2,967	1,586	1,381
1964	5,390	3,074	2,314	2,449	1,498	950	2,941	1,516	1,364
1965	5,910	3,397	2,513	2,485	1,531	954	3,425	1,866	1,559
1966	6,557	3,684	2,873	2,664	1,610	1,054	3,893	2,074	1,819
1967	6,519	3,633	2,886	2,734	1,658	1,076	3,786	1,976	1,810

SOURCE: Bureau of Labor Statistics

Table 3. Annual Average Youth Unemployment 1947-1967

Number in thousands

	Age 16-19			Age 16-17			Age 18-19		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1947	414	270	144	177	114	63	237	156	81
1948	407	255	152	178	112	66	229	143	86
1949	575	352	223	238	145	93	337	207	130
1950	513	318	195	226	139	87	287	179	108
1951	336	191	145	168	102	66	168	89	79
1952	345	205	140	180	116	64	165	89	76
1953	307	184	123	150	94	56	157	90	67
1954	501	310	191	221	142	79	280	168	112
1955	450	274	176	211	134	77	239	140	99
1956	478	269	209	231	134	97	247	135	112
1957	496	299	197	230	140	90	266	159	107
1958	678	416	262	299	185	114	379	231	148
1959	654	398	256	301	191	110	353	207	146
1960	711	425	286	324	200	124	387	225	162
1961	828	479	349	363	221	142	465	258	207
1962	720	407	313	311	187	124	409	220	189
1963	883	500	383	420	248	172	463	252	211
1964	872	487	386	435	257	179	437	230	207
1965	874	479	395	411	247	164	463	232	231
1966	836	432	404	395	220	175	441	212	229
1967	838	448	390	401	241	160	438	207	231

SOURCE: Bureau of Labor Statistics

Table 4. Annual Average Youth Total Labor Force Participation Rates, 1947-1967

	Percent of population in labor force (including armed forces)								
	Age 16-19			Age 16-17			Age 18-19		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1947	54.0	66.7	41.1	41.0	52.2	29.5	66.5	80.5	52.3
1948	54.6	67.0	42.0	42.5	53.4	31.4	66.2	79.9	52.1
1949	54.5	66.4	42.4	41.9	52.3	31.2	66.4	79.5	53.0
1950	53.6	65.9	41.0	41.1	52.0	30.1	65.3	79.0	51.3
1951	55.2	67.5	42.5	43.5	54.5	32.2	66.6	80.3	52.7
1952	54.2	65.9	42.2	43.4	53.1	33.4	65.4	79.1	51.4
1953	53.0	64.9	40.8	41.5	51.7	31.0	64.8	78.5	50.8
1954	51.0	62.2	39.5	38.6	48.3	28.7	63.6	76.5	50.5
1955	51.5	63.0	39.8	39.4	49.5	28.9	64.2	77.1	51.0
1956	53.8	65.0	42.3	42.8	52.6	32.8	65.1	77.9	52.1
1957	52.8	64.2	41.1	41.2	51.1	31.1	64.8	77.7	51.5
1958	50.3	61.3	39.1	38.1	47.9	28.1	63.2	75.7	51.0
1959	49.1	59.7	38.2	37.5	46.0	28.8	64.5	75.5	49.1
1960	49.5	59.4	39.4	38.1	46.8	29.1	62.4	73.6	51.1
1961	49.1	58.2	39.7	37.0	45.4	28.5	61.3	71.3	51.1
1962	48.5	57.7	39.1	35.4	43.5	27.1	61.5	71.9	50.9
1963	47.5	56.8	38.0	35.0	42.7	27.1	61.9	73.1	50.6
1964	46.7	56.1	37.1	35.6	43.6	27.4	60.7	72.0	49.3
1965	47.5	56.7	38.1	36.3	43.6	27.7	59.8	70.0	49.4
1966	49.9	58.1	41.5	38.9	44.6	30.7	60.6	69.0	52.1
1967	50.5	59.2	41.7	39.4	47.5	31.0	61.7	70.9	52.4

SOURCE: Bureau of Labor Statistics

Table 5

Youth Population, Labor Force, Labor Force Participation Rate, and Unemployment Rate, by Age, Sex, and Enrollment Status, October 1966

	Male			Female		
	Total	Enrolled	Not Enrolled	Total	Enrolled	Not Enrolled
Population[1]						
14-15	3,687	3,640	47	3,582	3,526	56
16-17	3,481	3,130	351	3,441	2,997	444
18-19	3,187	1,841	1,346	3,537	1,335	2,202
20-21	2,251	931	1,320	2,875	602	2,273
22-24	3,453	736	2,717	4,210	278	3,932
Labor Force						
14-15	622	604	18	419	407	12
16-17	1,462	1,204	258	1,007	811	196
18-19	1,882	690	1,192	1,832	447	1,385
20-21	1,605	362	1,243	1,502	195	1,307
22-24	3,119	416	2,703	2,167	148	2,019
Labor Force Participation Rate						
14-15	16.9	16.6	38.8	11.7	11.5	21.4
16-17	42.0	38.5	73.5	29.3	27.1	44.1
18-19	59.1	37.5	88.6	51.8	33.5	62.9
20-21	71.3	38.9	94.2	52.2	32.4	57.5
22-24	90.3	56.5	99.5	51.5	53.2	51.3
Unemployment Rate						
14-15	6.6	6.6	5.6	3.3	2.9	16.7
16-17	11.0	9.2	19.4	12.4	8.9	27.0
18-19	8.3	8.1	8.4	11.9	9.6	12.6
20-21	5.5	6.1	5.4	9.6	5.6	10.2
22-24	2.2	.7	2.4	4.7	-	5.1

1. Civilian non-institutional population.

SOURCE: Vera C. Perrella, "Employment of School Age Youth, October, 1966," *Special Labor Force Report, No. 87*, August 1967, Table 1, p. A-5.

fallen if only enrollment percentages had changed. Since 1951, however, participation rates of 14 to 17 year old enrolled youth declined then recovered, while participation rates of 18 to 19 year olds increased somewhat. The participation rates of out-of-school youth (except 18 to 19 year old girls) decreased considerably.

Despite the general declines in labor force participation rates after 1951, there were only small changes in the youth work-experience rates, or the percentage of population with some work during the year (Table 6). While there were some declines in the period 1961 to 1963, the rates tended to be stable, except for 14 to 17 year old boys for which there was a substantial decline.

The most striking changes were the very sharp drops in proportion of those with work experience who held year-round full-time jobs. Similarly, the proportion working primarily at part-time jobs increased very rapidly. Both of these changes were influenced by the growth of school enrollment.

Most young workers who work part-time do so voluntarily. This is because so many of the part-time workers are in school. However, looking at the full-time labor force of 16 to 19 year olds separately, 8.4 percent of those employed were on part-time schedules for economic reasons, compared to only 3.1 percent of those 20 and over. This suggests that failure to find full-time work is a serious problem that should not be lost sight of. In 1967, about two-thirds of the employed 16 to 17 year olds were voluntary part-time workers, and about three-fifths of the unemployed workers of those ages were seeking part-time work (Table 7). For the 16 to 17 year olds seeking full-time jobs the unemployment rate was 17 percent compared to 13 percent for those who sought part-time work.

Table 6. Work-Experience, Year-Round Full-Time Employment, and Part-Time Employment of Youth, by Sex, 1950 to 1965

	Percent of Population with Work Experience				Percent of Those with Work Experience Who Worked							
					Year-Round Full-Time (50 to 52 weeks)				Part-Time			
	Male		Female		Male		Female		Male		Female	
	14-17	18-19	14-17	18-19	14-17	18-19	14-17	18-19	14-17	18-19	14-17	18-19
1950	52.2	84.0	33.3	61.6	7.8	25.0	2.6	24.9	67.1	24.2	61.9	22.6
1955	54.5	90.5	36.3	70.3	5.2	21.5	1.1	21.6	69.8	32.8	68.5	24.5
1960	49.7	84.1	34.8	66.8	3.0	17.5	.7	18.1	77.5	40.1	77.9	35.3
1965	49.1	85.5	34.6	64.9	1.8	14.9	1.2	14.5	77.8	43.8	85.2	34.5

Source: Bureau of Labor Statistics.

Table 7

Full- and Part-time Status of the Civilian Youth Labor Force by Age and Sex,

Annual Averages, 1967

Age and Sex	Full-Time Labor Force				Part-Time Labor Force			Voluntary Part-Time Workers as Percent of Total Employed	Unemployment Rates		Unemployed in Part-Time Labor Force as Percent of Total Unemployed
		Employed				Employed					
	Total	Full-Time[1]	Part-Time for Economic Reasons	Unemployed	Total	on Voluntary Part-Time Work[1]	Unemployed		Full-Time Labor Force	Part-Time Labor Force	
Both Sexes											
16-17	914	597	158	159	1,820	1,578	241	67.6	17.4	13.2	60.2
18-19	2,745	2,238	185	323	1,041	927	115	27.7	11.8	11.0	26.3
20-24	7,988	7,295	260	433	1,023	945	78	11.1	5.4	7.6	15.3
Male											
16-19	2,007	1,558	200	249	1,627	1,428	199	44.8	12.4	12.2	40.4
20-24	4,597	4,255	138	205	447	417	30	8.7	4.5	6.7	12.8
Female											
16-19	1,653	1,276	143	233	1,234	1,077	157	43.2	14.1	12.7	40.3
20-24	3,391	3,041	122	229	576	528	48	14.3	6.8	8.3	17.3

SOURCE: Employment and Earnings, January, 1968, Table A-5.

Table 8. Youth Population, Labor Force, Labor Force Participation Rate, and Unemployment Rate, by Age, Sex, and Enrollment Status, October 1966.

	Male			Female		
	Total	Enrolled	Not Enrolled	Total	Enrolled	Not Enrolled
		(number in thousands)				
Population[1]						
14-15	3,687	3,640	47	3,582	3,526	56
16-17	3,481	3,130	351	3,441	2,997	444
18-19	3,187	3,841	1,346	3,537	1,335	2,202
20-21	2,251	931	1,320	2,875	602	2,273
22-24	3,453	736	2,717	210	278	3,932
Labor Force						
14-15	622	604	18	419	407	12
16-17	1,462	1,204	258	1,007	811	196
18-19	1,882	690	192	1,832	447	1,385
20-21	1,605	362	243	1,502	195	1,307
22-24	3,119	416	703	2,167	148	2,019
Labor Force Participation Rates			(percent of population in labor force)			
14-15	17.0	16.6	38.8	11.7	11.5	21.4
16-17	43.2	38.5	73.5	29.3	27.1	44.1
18-19	62.1	37.5	88.6	51.8	33.5	62.9
20-21	73.8	38.9	94.2	52.2	32.4	57.5
22-24	90.7	56.5	99.5	51.5	53.2	51.3
Unemployment Rate		(percent of labor force unemployed)				
14-15	6.6	6.6	5.6	3.3	2.9	16.7
16-17	11.0	9.2	19.4	12.4	8.9	27.0
18-19	8.3	8.1	8.4	11.9	9.6	12.6
20-21	5.5	6.1	5.4	9.6	5.6	10.2
22-24	2.2	.7	2.4	4.7	---	5.1

[1] Civilian non-institutional population.

Source: Vera C. Perrella, "Employment of School Age Youth, October, 1966," Special Labor Force Report, No. 87, August 1967, Table A, p. A-5.

Labor force participation rates increase with age (Table 8). Only a small fraction of 14 to 15 year olds work during the school year whether or not they are enrolled, while virtually all out-of-school men 22 to 24 years old are in the labor force. After age 15, the unemployment rate decreases with age, so that very few 22 to 24 year olds are unemployed.

The unemployment rates of nonwhite youth in most detailed-age, sex, and enrollment groups are much higher than the rates of comparable white youths (Table 9). As a result, nonwhite youth are more than one-fifth of total youth unemployment, about twice the proportions nonwhites make up of the total youth labor force and of the total youth population (Table 10).

Unemployment rates for boys are lower than for girls, so that one-half of the unemployed youth are boys, even though they are more than one-half of the youth labor force.

Unemployment rates are higher for unenrolled youth, as are labor force participation rates. As a result, slightly more than one-half of the unemployed youth are not enrolled, even though more than one-half of the youth labor force are enrolled (Table 11).

The proportion of unemployed youth made up of students has increased steadily during the post World War II period, pointing up the shrinking relative importance of dropouts.

Table 9. Unemployment Rates by Color, Age, and Sex, 1948-1967
(percent of civilian labor force unemployed)

	16-17				18-19			
	Male		Female		Male		Female	
	White	Nonwhite	White	Nonwhite	White	Nonwhite	White	Nonwhite
1948	10.2	9.4	9.7	11.8	9.4	10.5	6.8	14.6
1949	13.4	15.8	13.6	20.3	14.2	17.1	10.7	15.9
1950	13.4	12.1	13.8	17.6	11.7	17.7	9.4	14.1
1951	9.5	8.7	9.6	13.0	6.7	9.6	6.5	15.1
1952	10.9	8.0	9.3	6.3	7.0	10.0	6.2	16.8
1953	8.9	8.5	8.3	10.3	7.1	8.1	6.0	9.9
1954	14.0	13.4	12.0	19.1	13.0	14.7	9.4	21.6
1955	12.2	14.8	11.6	15.4	10.4	12.9	7.7	21.4
1956	11.2	15.7	12.1	22.0	9.7	14.9	8.3	23.4
1957	11.9	16.3	11.9	18.3	11.2	20.0	7.9	21.3
1958	14.9	27.1	15.6	25.4	16.5	26.7	11.0	30.0
1959	15.0	22.3	13.3	25.8	13.0	27.2	11.1	29.9
1960	14.6	22.7	14.5	25.7	13.5	25.1	11.5	24.5
1961	16.5	31.0	17.0	31.1	15.1	23.9	13.6	28.2
1962	15.1	21.9	15.6	27.8	12.7	21.8	11.3	31.2
1963	17.8	27.0	18.1	40.1	14.2	27.4	13.2	31.9
1964	16.1	25.9	17.1	36.5	13.4	23.1	13.2	29.2
1965	14.7	27.1	15.0	37.8	11.4	20.2	13.4	27.8
1966	12.5	22.5	14.3	34.8	8.9	20.5	10.7	29.2
1967	12.7	28.9	12.9	32.0	9.0	20.1	10.6	28.3

Source: Bureau of Labor Statistics.

Table 10. Youth Unemployment and Unemployment Rates, by Age, Sex, Color, and Enrollment Status, October, 1966.

		Male			Female			By Age and Enrollment Status	Both Sexes and Enrollment Statuses	Total	
		Total	White	Nonwhite	Total	White	Nonwhite			Age 16-19	Age 14-19
Unemployment											
14-15	Enrolled	41	28	12	12	8	4	52	55		715
	Not enrolled	1	-	1	2	2	0	3			
16-17	Enrolled	111	87	24	72	54	18	183	286	660	
	Not enrolled	50	42	8	53	35	18	103			
18-19	Enrolled	56	54	2	43	30	13	99	374		
	Not enrolled	100	81	19	175	132	43	275			
14-19	Enrolled	207	169	38	127	92	35	334			
	Not enrolled	151	123	28	230	169	61	381			
14-19	Total	358	292	66	357	261	96	715			
Unemployment Rates											
14-15	Enrolled	6.6	5.1	20.3	2.9	2.1	20.3	5.1	5.3		9.9
	Not enrolled	5.6	-	-	16.7	-	-	10.0			
16-17	Enrolled	9.2	8.0	20.7	8.9	7.2	28.1	9.1	11.6	10.7	
	Not enrolled	19.4	18.8	22.9	27.0	21.5	54.5	22.7			
18-19	Enrolled	8.1	8.4	4.2	9.6	7.5	27.7	8.7	10.1		
	Not enrolled	8.4	7.9	11.2	12.6	8.1	25.6	10.7			
14-19	Enrolled	8.3	7.4	17.0	7.6	6.0	24.6	7.5			
	Not enrolled	10.3	9.7	13.7	14.4	7.1	30.0	12.4			
14-19	Total	9.0	8.3	15.4	11.0	9.0	27.8	18.0			
Percent of Total											
14-15	Enrolled	5.7	3.9	1.7	1.7	1.1	.6	7.3	7.7		100.0
	Not enrolled	.1	-	.1	.3	.3	-	.4			
16-17	Enrolled	15.5	12.2	3.4	10.1	7.6	2.5	25.6	40.0	92.3	
	Not enrolled	7.0	5.9	1.1	7.4	5.0	2.5	14.4			
18-19	Enrolled	7.8	7.6	.3	6.0	4.2	1.8	13.8	52.3		
	Not enrolled	14.0	11.3	2.7	24.5	18.5	6.0	38.5			
14-19	Enrolled	29.0	23.6	5.3		12.9	4.9	46.7			
	Not enrolled	21.1	17.2	3.9		23.6	8.5	53.2			
14-19	Total	50.0	40.8	9.2	49.9	36.5	13.4	100.0			

Source: Derived from Vera C. Perrella, "Employment of School Age Youth, October 1966," Special Labor Force Report, No. 87, August 1967, Table D, p. A-8.

Table 11. Youth Unemployment Rates, by Age, Sex, and Enrollment Status, October, 1947-1966

	14-17 Years Old			16-17			18-19		
	Unemployment Rate		Percent of Unemployed	Unemployment Rate		Percent of Unemployed	Unemployment Rate		Percent of Unemployed
	Enrolled	Not Enrolled	Enrolled	Enrolled	Not Enrolled	Enrolled	Enrolled	Not Enrolled	Enrolled
Male									
1947	2.7	11.0	18.3	n.a.	n.a.	n.a.	5.4	7.4	8.2
1948	2.3	7.8	26.4	n.a.	n.a.	n.a.	4.7	7.5	8.7
1949	6.6	16.6	32.9	n.a.	n.a.	n.a.	4.9	12.0	5.2
1950	3.6	10.9	37.6	n.a.	n.a.	n.a.	5.3	6.1	15.3
1951	4.3	7.4	53.7	n.a.	n.a.	n.a.	3.5	4.5	11.1
1952	3.8	10.6	37.5	n.a.	n.a.	n.a.	3.1	3.8	14.3
1953	4.7	11.6	40.8	7.0	12.9	37.1	2.4	4.7	9.4
1954	6.5	15.7	51.1	8.1	15.8	45.1	6.5	6.6	17.1
1955	5.1	16.6	46.2	6.2	18.4	37.8	10.6	5.9	36.7
1956	5.2	14.7	50.0	7.0	13.9	45.9	6.3	5.3	29.9
1957	5.8	16.0	56.1	6.9	15.4	48.5	8.0	10.9	18.9
1958	8.2	24.1	52.2	8.7	25.7	42.9	9.1	16.6	15.5
1959	7.6	24.3	53.6	10.0	25.7	47.6	9.4	15.1	16.8
1960	7.8	18.5	60.3	11.0	18.3	57.8	10.5	16.5	18.1
1961	10.4	21.8	64.7	12.9	21.5	57.9	10.2	15.2	18.7
1962	8.4	15.1	72.3	10.9	15.1	67.2	9.7	13.0	22.9
1963	9.5	20.1	71.9	12.4	20.5	68.7	9.2	14.8	20.3
1964	8.8	14.3	78.8	10.1	14.8	72.7	8.5	13.3	20.7
1965	54.8 9.8	15.7	76.4	12.2	16.4	71.3	12.3	10.4	36.9
1966	8.4	18.5	74.8	9.2	19.4	68.9	9.1	8.4	35.9
Female									
1947	3.1	9.1	22.2	n.a.	n.a.	n.a.	5.6	5.0	8.5
1948	2.1	6.9	25.6	n.a.	n.a.	n.a.	4.6	4.6	5.9
1949	5.0	12.5	33.3	n.a.	n.a.	n.a.	1.9	10.7	1.7
1950	4.7	10.0	43.3	n.a.	n.a.	n.a.	4.2	7.6	7.5
1951	2.7	10.8	36.0	n.a.	n.a.	n.a.	1.6	6.1	3.2
1952	3.9	9.7	37.0	n.a.	n.a.	n.a.	2.6	6.9	2.9
1953	1.5	10.3	17.9	2.5	10.4	18.9	7.3	5.2	12.3
1954	3.2	19.8	27.1	3.9	20.6	24.2	4.0	9.9	5.0
1955	5.7	9.7	55.4	4.8	9.8	38.6	8.1	7.2	12.9
1956	5.3	9.6	60.3	8.0	8.5	62.7	2.5	6.9	5.7
1957	5.7	12.9	59.2	6.8	14.2	50.8	3.6	6.0	9.1
1958	5.6	21.8	39.2	8.1	22.5	37.6	6.2	11.1	11.1
1959	6.2	15.2	58.7	8.5	15.2	55.7	5.6	13.1	8.1

(Continued)

Table 11. (Continued)

	14-17 Years Old			16-17			18-19		
	Unemployment Rate		Percent of Unemployed	Unemployment Rate		Percent of Unemployed	Unemployment Rate		Percent of Unemployed
	Enrolled	Not Enrolled	Enrolled	Enrolled	Not Enrolled	Enrolled	Enrolled	Not Enrolled	Enrolled
Female (continued)									
1960	6.9	20.2	49.2	9.5	19.0	48.0	6.2	13.0	8.6
1961	7.7	19.0	58.0	11.5	20.2	52.0	8.1	14.5	10.1
1962	7.4	17.9	62.5	9.3	18.8	53.8	10.8	12.3	13.7
1963	10.2	33.0	57.9	11.4	34.6	50.0	11.9	14.9	15.1
1964	10.3	25.3	65.1	14.8	26.0	64.3	10.8	15.3	13.0
1965	6.2	22.4	61.7	8.6	23.7	59.3	9.4	13.7	16.0
1966	6.9	26.4	60.4	8.9	27.0	57.6	9.6	12.6	19.7

n.a. = not available.

Source: Bureau of Labor Statistics.

Do Unemployment Rates Understate Unemployment?

Before proceeding to examine the causes of youth unemployment, it must be determined if unemployment rates represent what they purport to represent. This question has been examined at great length in the literature, and it is now generally recognized that there are short-term responses of labor force participation rates to unemployment among secondary workers of which youth are one group.[10] That is to say, when the general level of unemployment increases there appears to be a decrease in the labor force participation rates of youth. The period of high general unemployment (roughly 1957-1964) coincides with a period when an increase in school enrollment would be expected for reasons other than unemployment.[11] Despite high unemployment, family real income increased steadily during the period, and increased emphasis was placed on the importance of education. While it must be recognized that high unemployment reduces the opportunity cost of remaining in school,[12] rising expectations with respect to the value of education and lessened family need also encourage longer school attendance. The same general downtrend in labor force participation rates is observed both for all youth and for out-of-school youth. High general unemployment may induce a reduction in the labor force participation rates of dropouts, induce continued enrollment, and induce higher labor force participation rates for enrolled youth. In effect, some of the youth who would be job-seeking dropouts if general unemployment were lower become job-seeking students.

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[10] There are several studies that should be specifically mentioned. William G. Bowen and T. A. Finnegan, in "Labor Force Participation and Unemployment," in Arthur M. Ross, editor, Employment Policy and the Labor Market (Berkeley: University of California Press, 1965), using cross-section analysis of city data for 1940, 1950, and 1960, found significant negative relationships between unemployment and labor force participation rates (controlling for a number of other variables) for male and single female youth for 1950 and 1960. The negative effect was somewhat stronger for out-of-school youth than for enrolled youth. Similar results for youth using time series data and somewhat different models were found by K. Strand and T. Dernburg, "Cyclical Variation in Labor Force Participation," Review of Economics and Statistics, XLVI (November, 1964), 378-391; and by Alfred Tella, "The Relations of Labor Force to Unemployment," Industrial and Labor Relations Review, XVII (April, 1964), pp. 454-469, and "Labor Force Sensitivity to Employment by Age, Sex," Industrial Relations, IV (February, 1965), pp. 69-83. These are all examined and criticized in Jacob Mincer, "Labor Force Participation and Unemployment: A Review of Recent Evidence," in R. A. and M. S. Gordon, Prosperity and Unemployment (New York: Wiley, 1966), pp. 73-112, especially his Table 1, p. 86.

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[11] Beverly Duncan shows persuasively, but not beyond cavil, that continuation in school and high general unemployment are positively related, in "Dropouts and the Unemployed," Journal of Political Economy (April, 1965), pp. 121-133. This question is tied into the "additional" worker and "discouragement" hypotheses, which have extensive if indecisive literatures. Duncan's work, of course, tends to contradict the additional worker hypothesis.

[12] This point is made by Duncan, op. cit., and by Jacob Mincer, op. cit.

When this process is examined by regressing youth unemployment labor force participation rates on the prime unemployment rate (rate of white men 35 to 44 years old) and trend, it is seen that only for 16 to 17 year olds is the unemployment rate significant, although downtrends are observed for most of the groups (Table 12).

Regardless of the trends, however, an attempt by the Bureau of Labor Statistics to assess the number of youth not in the labor force "who wanted a regular job" failed to find very many boys out of school who were not in the labor market because they "believed it would be impossible to find work" (Table 13). The number of discouraged students was much greater, and 89 percent of those who wanted a regular job but were not looking were in school. If the 22 thousand were added to the unemployment and labor forces of out-of-school boys 16 to 19 years old in October 1966, the unemployment rate would rise from 10.3 percent to 11.7 percent and the labor force participation rate from 85.4 percent to 86.7 percent. If the 133 thousand enrolled youth who wanted a regular job but believed jobs to be unavailable were similarly treated, the result would be a rise in the unemployment rate from 8.8 percent to 14.8 percent and the labor force rate from 38.1 percent to 40.8 percent. Thus we can conclude that "disguised unemployment" is far more important for enrolled youth than for out-of-school youth. These findings tend to minimize the importance of "discouragement" for out-of-school youth but not the effect of general unemployment in inducing youth to stay in school. Observations on an earlier period would be necessary to support the contention that the proportion of discouraged enrolled youth had increased.

Table 12

Regression of Youth Labor Force Participation Rates on Prime Unemployment Rate and Trend,

1948-1966

Labor Force Participation Rate of	Intercept	On Unemployment Rate of White Males 35-44		On Time (1948 = 0)		R
		Coefficient	Standard Error	Coefficient	Standard Error	
MALE						
(13) 16-17	53.0817	-1.5635	1.0530	--	--	.3388
	57.8653	-1.3917**	.4320	-.5845**	.0633	.9274
(14) 18-19	77.1680	- .5415	1.0450	--	--	.1247
	82.1052	- .3643	.3225	-.6033**	.0473	.9550
(15) 20-24	90.1275	- .1974	.4901	--	--	.0972
	90.5905	- .1808	.4963	-.0566	.0728	.2133
FEMALE						
(16) 16-17	33.2137	-1.2455**	.4903	--	--	.5246
	35.0047	-1.1812**	.3415	-.2189**	.0501	.8184
(17) 18-19	51.5856	- .1729	.3098	--	--	.1341
	52.4368	- .1423	.2659	-.1040**	.0390	.5661
(18) 20-24	47.9624	- .4618	.5363	--	--	.2045
	45.7795	- .5402	.3150	.2667**	.0462	.8303

** Significant at the .01 level.

Table 13

Male Youth 16 to 19 Years Old Not in the Labor Force Who Wanted a Regular Job, by Reason for Not Looking for Work, September, 1966

	Number in Thousands	Percent Distribution
TOTAL	673	100.0
Ill health, disability	11	1.6
In school	468	69.5
Believed it would be impossible to find work	(133)	(19.8)
Miscellaneous personal reasons	22	3.3
Believed it would be impossible to find work, total	155	23.0
Not in school	(22)	(3.3)
Expect to be working or seeking work shortly	17	2.5

SOURCE: Robert L. Stein, "Reasons for Nonparticipation in the Labor Force," Special Labor Force Report, No. 86, July, 1967, Table 4, p. 26.

Frictional Unemployment

In the normal pattern a youth will enter and leave the labor force several times before he leaves school permanently. Not all new entrants experience unemployment on entering the labor force, but many do. Not all students who leave summer jobs to return to school experience unemployment before leaving the labor force, but some do.

The unemployment resulting from labor force and job mobility is usually termed frictional. In an ideal labor market in which there was one vacancy suitable for each unemployed worker the process of search would take time, and the unemployment that occurred while the unemployed searched out the jobs is frictional unemployment in my definition. In the real world, the search process is complicated by an accommodation process by which employers gradually relax requirements or improve attractions of jobs as vacancies persist and workers make reductions in job characteristics demanded as unemployment persists.

Those unemployed persons who cannot find jobs regardless of the amount of search and accommodation they undergo are sometimes termed "structurally unemployed." If the time horizon during which accommodations take place is distant, then very few younger workers can be considered structurally unemployed. Another definition would simply identify the very long-term unemployed as structurally unemployed. Using this definition, it can be concluded that structural unemployment among youths rose very sharply after 1957, but has decreased after 1961 (Table 14). In 1966, long-term unemployment was no worse than in 1957. Even the increase in long-term unemployment is insufficient to explain the increases in youth unemployment rates during the early 1960's. While the average duration of unemployment lengthened from 1957 to 1961, it decreased after 1961, the

Table 14

Annual Average Long-Term Unemployment of Youth, 1957-1966

	14 to 19 year old unemployed 27 weeks or longer		
	Number (Thousands)	As Percent of Total Youth Unemployment	As Percent of Total Unemployed 27 Weeks or Longer
1957	23	4.0	9.7
1958	57	7.5	8.6
1959	58	7.1	10.1
1960	47	5.6	10.4
1961	77	8.4	9.6
1962	67	8.2	11.4
1963	73	7.5	13.2
1964	66	6.7	13.7
1965	50	5.2	14.2
1966	34	3.6	14.2

SOURCE: Bureau of Labor Statistics.

period during which youth unemployment rates rose relative to other rates. The timing does not support the view that the mismatch between vacancies and job seekers has worsened secularly, rather it implies that the high long-term unemployment percentages observed from 1958 to 1963 were largely the result of the two recessions that occurred during the period. Similar results hold for other durations of unemployment. Youth 14 to 19 years old made up smaller proportions of longer term than of shorter term unemployment in 1966:

	Duration of Unemployment			
	Total	Under 15 Weeks	15 to 25 Weeks	26 Weeks and Over
Youth 14 to 19 as percent of total unemployment in duration category	19.9	34.0	24.7	14.1
Number of youth in category (annual average in thousands)	937	830	73	34
Percent distribution	100.0	88.6	7.8	3.6

Source: Bureau of Labor Statistics.

Despite the relatively small proportion of unemployed youth in the average month who have experienced long-term unemployment, the share of youth in total long-term unemployment has increased. This increase is a result of the increase in youth unemployment as a proportion of all unemployment and does not reflect a lengthening of average duration of unemployment among youth.

Seasonal Variation in Labor Force and Unemployment Rates

Unlike most other labor force groups, youth shows high seasonal variation in labor force participation and unemployment rates. Because many youths move into the labor force in June and out of the labor force in September in response to the pattern of school attendance, the labor market is flooded for three months (Table 15). The unemployment rate usually reaches its annual peak in June and then declines to a rate about the same as during the school year by August.

The seasonal efforts of enrolled youth to find work complicate the efforts of school leavers to find jobs at the same time. Almost all high school graduates enter the labor force in June and a substantial number of the dropouts decide not to continue schooling at the same time. The committed workers in these groups compete with the summer workers for jobs, many of whom pretend to seek permanent jobs. As a result, many employers are reluctant to hire graduates and dropouts who are committed to the labor force because of their experience with summer workers who claim to be seeking permanent jobs.

Table 15

Seasonal Labor Force and Unemployment Rates of Youth 16 to 19 Years Old, 1966

	January	February	March	April	May	June	July	August	September	October	November	December
Civilial Labor Force												
Total	5,520	5,434	5,514	5,874	6,119	8,213	8,817	8,368	6,071	6,182	6,283	6,287
Unemployment Rates												
Total	12.7	11.7	12.7	13.4	15.9	19.5	13.0	9.4	11.1	10.7	11.3	10.5
Male	12.6	11.7	13.1	11.7	14.2	16.2	11.3	8.0	10.5	9.5	10.3	11.8
Female	12.8	11.6	12.1	15.7	18.2	24.1	15.5	11.3	12.0	12.1	12.5	9.2

SOURCE: Bureau of Labor Statistics, Employment and Earnings, Vol. 13, No. 9 (March, 1967), pp. 8, 10, 11.

The First Job

Once he leaves school, the youth searches for a job. The speed with which he finds employment depends on the state of the labor market, the thoroughness of search, vacancies, and employer preferences. The pattern is shown in a survey of out-of-school youth 16 to 21 years old who had not graduated from college (Table 16). Nearly all male school leavers looked for work, and of these, seven-tenths of the high school dropouts, three-fourths of the high school graduates, and seven eighths of the college dropouts found a job in less than five weeks.

Significant numbers of girls never look for work after leaving school. For high school and college girls, marriage and childbearing were common reasons for dropping out and not working. Among those who looked for work, the speed of finding employment was about the same for boys and girls, but was faster for the more educated than for the less educated.

A similar pattern is shown with respect to success in finding a full-time job. Those who left school young had much greater difficulty finding a full-time job after leaving school than did older school leavers.[13]

Most young workers eventually find jobs, but they often spend months looking (or just waiting) for them. The fact that nearly all youth eventually find jobs suggests that it is not their own characteristics (or "unemployability") that matters, but employer attitudes. Eventually, most of the undereducated, the nonwhites, and the other disadvantaged do find

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[13] See BLS, Handbook of Labor Statistics (Washington: Government Printing Office, 1967), Table 54, p. 88.

Table 16

Length of Search to First Job After Leaving School, Out-of-School

Youth 16 to 21 Years Old, February, 1963

	Did Not Look for Work and Never Worked	Looked for Work or Worked							Never Found a Job[2]
		Percent of Total	Total[1]	Had Job Waiting	Less Than 5	5 to 14	15 to 26	27 or More	
Males									
Less than 4 years of high school	1.5	98.5	100.0	36.4	32.8	10.3	4.7	5.5	10.2
4 years of high school	1.9	98.1	100.0	43.0	30.7	15.9	3.0	2.4	5.0
1 to 3 years of college	--	100.0	100.0	46.5	41.1	7.0	--	1.6	3.8
Females									
Less than 4 years of high school	22.8	77.2	100.0	20.8	45.8	10.9	8.0	3.9	10.6
4 years of high school	7.7	92.3	100.0	34.5	36.1	14.5	5.7	3.2	6.1
1 to 3 years of college	12.2	77.8	100.0	36.0	45.0	14.2	--	--	4.8

1. Includes those who worked but did not look for work and those who did not report the weeks to first job distributed over the weeks in same proportion as those who reported.

2. Had not found job by date of survey.

SOURCE: Vera C. Perrella and Forest A. Bogan, "Out-of-School Youth, February, 1963," Special Labor Report No. 46, November, 1964, Table B-1, p. A-8.

jobs, and the vital change appears to be simply aging. This point cannot be stressed too strongly, because it is part of the folklore of youth unemployment that the unemployed youth becomes an unemployed adult. There is no evidence that supports this myth. As shown above, out-of-school men 22 to 24, in 1966 were almost all employed; but six years earlier these same persons were experiencing extremely high unemployment rates.

Occupational Mobility

The average youth enters the labor force initially as a part-time or summer job seeker. He is not available for "career" jobs, rather he seeks a "youth" job. This distinction is not precise, only useful. Youth jobs do not necessarily lead to career jobs but are open to young workers. They include babysitting, farm labor, sales clerks in variety or food stores, and the like. Typically these jobs are in non-union firms, small firms, and only infrequently lead to permanent or career employment. Such jobs are open to youth because they require little in the way of experience, training, education, or responsibility. Career jobs, in contrast, are the first rungs on job ladders that lead to good jobs. These include jobs in manufacturing, offices, and large stores in which employment can be expected to be permanent and to lead to better jobs.

The pattern of occupational change of dropouts and students shown in Table 17 suggests that immediately after leaving school they have occupational distributions that are similar to those of teenagers in general, i.e., youth jobs. The longer the period since leaving school the more adult the occupational pattern becomes. Farm labor shrinks in significance, and more and more enter professional and technical jobs (for graduates) and craftsmen and foremen (for both groups).

Occupational upgrading implies occupational mobility, which apparently requires job mobility.[14] Unemployment is associated with job

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[14] In a 1966 study the occupational mobility of workers 18 to 19 years old who changed jobs was much higher than for those who did not change jobs. See Samuel Saben, "Occupational Mobility of Employed Workers," Special Labor Force Report No. 84, May, 1967. The job changing that often accompanies occupational mobility gives free range to worker mendacity by which past experience is exaggerated and the worker is enabled to fill a job for which he lacks formal qualifications. An outstanding, if extreme, example is the recent case of the ex-convict who learned some X-ray technology in prison and managed to practice medicine successfully in a Texas town.

Table 17

Major Occupation Groups of Male High School Graduates Not Enrolled in College and School Dropouts, October, 1966

	Graduates				Dropouts				Occupational Distribution Male Youth, 1964		
	Year of Graduation				Last Year Attended School						
	1966	1965	1964	Prior to 1964	1966	1965	1964	Prior to 1964	16-17	18-19	20-21
Professional, technical, and kindred	2.3	6.8	4.0	16.8	2.0	--	1.5	0.8	1.4	3.0	6.9
Farmers and farm managers	.5	.6	1.7	1.7	--	2.6	--	1.1	.6	.7	1.0
Managers, officials, and proprietors except farm	2.0	1.2	5.1	8.7	--	--	2.2	2.3	.5	1.4	3.3
Clerical and kindred workers	13.6	9.6	11.4	11.5	6.9	1.3	5.9	3.3	6.4	10.3	12.5
Sales workers	3.0	6.2	4.0	6.6	4.0	--	--	2.4	10.6	6.0	5.2
Craftsmen, foremen, & kindred workers	10.8	12.1	11.7	17.4	8.9	9.0	9.6	19.1	4.1	8.3	12.9
Operatives and kindred workers	35.9	37.2	39.6	25.6	39.6	42.9	40.1	42.2	16.1	30.7	30.5
Private household workers	--	--	.6	--	--	--	--	.2	.9	.2	.1
Service workers, except private household	5.3	2.5	3.4	5.4	6.9	9.0	8.5	5.8	15.1	10.9	8.1
Farm laborers and foremen	4.0	5.9	2.8	1.3	18.8	9.0	11.8	5.8	17.5	9.2	5.7
Laborers, except farm and mine	22.6	18.0	15.7	5.0	12.9	26.3	20.6	17.2	16.0	11.1	8.2

SOURCE: Bureau of Labor Statistics, Special Labor Force Report No. 85, Tables C and D, and No. 56, Table A, p. A-5.

changing, and in a 1955 study it was found that about 44 percent of the 18 to 19 year old male workers who changed jobs experienced some unemployment, and this was about the same rate as workers who were somewhat older.[15] It should be noted that the rate of occupational mobility of youth is significantly higher than for older groups of workers.[16] In a sense then, the unemployment that results from occupational upgrading may be socially desirable, but this is not to say that it could not be reduced or should not be reduced by improvements in the organization of the labor market.

The problem of moving from the youth job market into the career job we shall term the "transition." Because of the limitations on enrolled workers listed above, the young worker is usually limited to the youth job market. In these jobs the youth obtains experience that may aid him in making the transition to a career job.

The critical point is that the transition is neither smooth nor easy and does not occur until the late teens or early 20's for most youths, whether or not they are high school graduates. This slow transition has been termed "floundering."[17] The problem in making the transition is often one of information and personal connections. "Good jobs" are commonly thought to be scarce, and job information is also scarce.[18] Young job

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15. See Robert L. Stein, "Unemployment and Job Mobility," Special Labor Force Report No. 3, April, 1960, p. 355.

16. Saben, op. cit.

17. Percy E. Davidson and H. Dewey Anderson, Occupational Mobility in an American Community (Stanford: Stanford University Press, 1937), Chapter 3, "The Floundering Period."

18. See, for instance, George J. Stigler, "Information in the Labor Market," Journal of Political Economy, Supplement to Vol. 50 (October, 1962).

seekers believe that "contacts" are important.[19] All studies of job search show friends and family are of major importance.[20] The role of family connections in apprenticeship and other union controlled "good" jobs is well documented.[21]

Even after the connection is made and the job taken, many young workers leave. Studies of apprenticeship show high dropout rates, even from programs that are known to lead to "good jobs." Thus information and connections that lead to jobs are inadequate, for, very often, the only way a worker learns whether he likes the job or not is by working at it.[22] Hence, quits are common after a few weeks or months of work.[23] It is not justifiable to criticize this process as wasteful unless we can measure the social costs and benefits,[24] even if, as is often asserted, it is associated with high youth unemployment.[25] Only the most sanguine or uninformed would argue that even vastly improved use of guidance techniques and vocational interest and ability instruments would fully substitute for the search process. Even if the instruments were reliable and valid, occupational wants and needs change as workers learn and develop.

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[19] See Larry D. Singell, "Some Private and Social Aspects of the Labor Mobility of Young Workers," Quarterly Journal of Economics and Business (Spring, 1966), p. 21.

[20] Of recent studies, Harold L. Sheppard and A. Harvey Belitsky, The Job Hunt (Baltimore: The Johns Hopkins Press, 1966) found 77 percent of a sample of blue-collar workers used friends and relatives as a job finding technique (Table 3-9, p. 45); and Irvin Sobel and Hugh Folk, "Labor Market Adjustments of Unemployed Older Workers," in A. M. Ross, Employment Policy and the Labor Market (Berkeley: University of California Press, 1965) found that 36 percent of workers under age 35 used friends and relatives as a method of job search (Table 11-10, p. 343).

[21] F. Ray Marshall, "Racial Factors Influencing Entry into the Skilled Trades," in Mark Perlman, editor, Human Resources in the Urban Economy (Washington: Resources for the Future, 1963), pp. 23-36.

[22] Lloyd Reynolds points out, ". . . the intrinsic difficulty of 'window shopping for jobs,' the fact that many of the most important features of a job cannot be appraised until one has worked on it." The Structure of Labor Markets, p. 109.

[23] It can be seen that this process holds for workers of all ages, since quit rates for short service workers are high in all age groups. See H. Folk Private Pension Plans and Manpower Policy, BLS Bulletin 1359, Table 2.5, p. 9.

[24] The economic benefits to workers of mobility are very great. For instance, Robert L. Bunting found for a sample of workers under 20 in three Southern states that during 1953 the mean quarterly earnings increased 17.6 percent for those who did not change employers; 51.5 percent for those with

It is true that American youth are very uncertain about their occupational plans while they are in school,[26] but the principal problem in youth unemployment is that of the worker finding his first job. The amount of unemployment that results from the job changing of experienced youth job seekers is relatively small.

Despite these comments in praise of mobility, I recognize the grave shortcomings of the present methods of finding jobs. It certainly seems well within the range of human ingenuity to develop a system that would allow direct placement of youth in career jobs without the purposelessness of much of the transition.

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two or three employers; and 28.2 percent for those with four or more employers. "Labor Mobility and Wage Improvement," in Mark Perlman, ed., Human Resources in the Urban Economy (Washington, D.C.: Resources for the Future, 1963), p. 215. "Improvement of status" was far more important than "economic reason" as a reason for job shifts of young workers in 1955 and 1961. See Bureau of the Census, Current Population Reports, Labor Force, Series P-50, No. 70, February, 1957.

25. An example of this criticism is Dean M. Morse, "The Peripheral Worker in the Affluent Society," to be published in the Proceedings of the 1967 meetings of the Industrial Relations Research Association.

26. See, for example, Seymour M. Lipset, Reinhard Bendix, and F. Theodore Malm, who found 55 percent of their sample had no specific job plans while in school. "Social Origins and Occupational Career Plans," Industrial and Labor Relations Review (January, 1954), pp. 246-261. College youth also frequently change their career plans, so that those who have specific plans often change them. See James A. Davis, Great Aspirations: Career Decisions and Education Plans During College (Chicago: National Opinion Research Center, 1963), pp. 70-71. Changes in occupational plans are extensive even for the most able and intelligent students; see Robert C. Nichols, "Career Decisions of Very Able Students," Science, Vol. 12 (June, 1964).

Dropouts and Graduates

The labor force participation rates of dropouts are much higher than the rates of students. Even so, there is some movement into and out of the labor force by dropouts, but most of this movement appears to be voluntary. In September, 1966, relatively few nonenrolled male teenagers (22 thousand) reported that they were not in the labor force because they believed it was impossible to find work.

One of the major problems of the school dropout is that he becomes committed to the labor force before he is eligible for most career jobs. In short, he competes with students (who are often better qualified) for youth jobs and must age before he is eligible for career jobs. Even then, of course, he is relatively disadvantaged. Nearly all dropouts eventually become employed, but their jobs tend to be inferior to those of graduates.

The transition for the graduate is not easy either. Apparently a substantial number of the graduates who are not enrolled in college are working in youth jobs during the first year or so after graduation.

Thus the average youth goes through several periods of job search and usually seeks youth jobs until leaving school and career jobs after leaving school.

The importance of both age and period of participation in the labor force both for graduates and for dropouts is shown in Table 18. The unemployment rate decreases with increasing age within each group, and,by age 20 to 21 for male graduates, the rate is only 4.1 percent. The lack of noticeable difference in unemployment rates between male graduates and male dropouts for 16 to 17 and 18 to 19 year olds suggests that as far as unemployment rates are concerned, the importance of finishing high school has been somewhat exaggerated. It is in occupational experience and

Table 18

Employment Status of High School Graduates Not Enrolled in College and of School Dropouts, by Age and Sex, October, 1966

	High School Graduates			School Dropouts		
	Number (000)	Labor Force Participation Rate	Unemployment Rate	Number (000)	Labor Force Participation Rate	Unemployment Rate
Male						
16 and 17 years	53	62.3	18.2	298	75.5	19.6
18 and 19	800	88.5	8.3	546	88.6	8.5
20 and 21	810	94.3	4.1	510	93.9	7.5
Female						
16 and 17 years	139	61.9	12.8	305	25.1	38.2
18 and 19	1,584	71.1	12.3	618	41.9	14.3
20 and 21	1,672	65.1	9.6	601	36.4	12.8

SOURCE: Bureau of Labor Statistics.

consequently in the earnings of dropouts that the role of graduation becomes important. Among boys there is little difference between dropouts and graduates in labor force participation, but for girls the differences are striking, with graduates having much higher participation rates. These data, together with the observations on trends in unemployment rates examined below illustrate the major problem of unemployment among girls.

Discrimination Against Youth

Employers discriminate against youth for several reasons. Employers may prefer not to hire youth because the youth do not meet the employer's standards with respect to age, education, arrest records, draft status, sex, or race. The employer's standards may be rational in that they are based on experience or irrational in that they result from mere prejudice.[27]

Employers may also discriminate because workers have inadequate experience. A very large proportion of employers promote from within, so good jobs are often not open to outsiders, whatever their age. Few of the jobs in rapidly growing occupations, such as professional and technical jobs, are open to youth directly. To the extent that these jobs are filled by upgrading, however, youth outside the firm may be eligible for employment in entry jobs by a trickle-down process. It must be remembered that occupational upgrading occurs largely by job hopping in the early years of work so that good entry jobs often have a previous experience requirement. Employers hope by this means to have other employers serve as a screening device.

Many of the jobs in transportation, construction, and manufacturing are closed even to youth available for full-time year-round work because of

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27. For instance, an employer may have higher insurance and bonding rates if he employs ex-convicts, or he faces the obligation of rehiring a worker who is drafted after he completes his service. Discrimination for these reasons may be deplorable, but it is certainly rational.

the legal minimum ages for hazardous work.[28] This applies especially to dropouts, many of whom enter the labor force well before they are 18. Other jobs are closed because of custom or prejudice, or by the imposition of an irrelevant hiring criterion, such as high school graduation, which is in most instances equivalent to a minimum age requirement. Among the outstanding discriminators of this type are government agencies and educational institutions, which employ few youths and frequently impose irrelevant educational requirements.[29]

As long as discrimination is not practiced by all employers, or as long as discrimination represents only preferences and not absolute aversion, there should be no noticeable effect on the unemployment rates of youth. The exclusion of workers from one set of jobs should depress wage rates in the jobs which are not barred to youth. The limitation of a group of job seekers to one set of jobs (for instance "youth jobs") may have

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28. Protective labor legislation has been accused of contributing to high youth unemployment. While state laws differ, the general standard is that all wage employment is barred to those under 14, all employment during school hours is barred to those under 16 during school hours, and certain hazardous jobs and industries are barred to youth under 18. This limits employment opportunities in many jobs for youth, and some employers prefer to avoid even the possibility of problems by hiring no one under the age of 18. Many of the entry jobs in manufacturing, transportation, and communications are by their nature hazardous, so that career entry must be delayed at least until age 18. The state's concern for the safety of 17 year olds contrasts strikingly with its willingness to let them drive automobiles or join the Armed Forces, since the highways and Vietnam are two hazardous places in recent years. See Clara M. Beyer, "Youth Employment Opportunity and Protection," Social Action (February, 1957), reprinted in Readings in Unemployment, pp. 729-37.

29. For example, New York City has in the past required a high school diploma in addition to civil service tests for its white-collar jobs. This requirement was recently dropped as part of a review of requirements intended to knock out "artificial barriers." See New York Times, March 18, 1968, p. 55.

adverse effects on worker motivation and wages but it need not cause higher levels of unemployment than would otherwise prevail. If, however, the pool of jobs to which the group is restricted grows more slowly than the number of job seekers, unemployment can rise and remain high during the period in which employers make accommodating adjustments to the greater relative abundance of the discriminated against workers. This is a dynamic problem of employer adjustment to excess supply. The rate of accommodation is likely to be higher if there are shortages of workers for whom the discriminated against workers are close substitutes. Thus the very low unemployment rates of prime age men induces employers to reduce their requirements and to substitute the next most desirable group. This process leads to discrimination within the youth group, with older youth being preferred to younger youth. If 18 to 19 year old graduates, students, and dropouts are unable to find career jobs they spill over into or remain in the youth job market and make the problems of 16 to 17 year olds more difficult than they would otherwise be.

This pattern of adjustment has apparently occurred in the last few years. The unemployment rate of men 20 to 24 years old has dropped in the last few years and this drop has been followed by slight decreases in the unemployment rates of younger groups. Even so, the unemployment rates of the least preferred groups, younger nonwhites, especially girls, have remained very high. Even if, as economists assert, the mills of substitution grind exceeding fine, they also grind slowly (as might be expected from the metaphor).

The failure of wages in entry jobs to fall as a result of the excess supply of young workers is hardly surprising, given the way in which wages are set in large corporations.[30] Some employers have job evaluation systems that set job rates without regard to the state of the labor market, othe are bound into a negotiated wage pattern that makes entry rates unresponsive. In many instances, entry wage rates are far above the minimum necessary to attract suitable workers. Because of this the employer can choose among a number of job seekers, and he often selects on irrelevant criteria. The fortunate worker who gets the job is paid more than is necessary because he gets the rate attached to the job. A large aircraft firm, for instance, requires even its sweepers to be high school graduates. This is an obvious absurdity, but such conditions abound.

In the competitive labor market of small firms without rigid wage systems there is often a floor to wages which is set by custom and practice (a "social minimum wage") or by law. Such minimums enforce employer discrimination against workers who are not worth as much as the minimum.

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[30] The point that persistent structural unemployment usually involves wage rigidity has been made repeatedly, perhaps most effectively in Melvin W. Reder, "Wage Structure and Structural Unemployment," Review of Economic Studies (October, 1964), pp. 309-322. The problem is that most filled jobs are not subject to recontracting, and even jobs with vacancies or surplus applicants in organized firms are not usually subject to individual wage adjustment.

Does the Minimum Wage Reduce Youth Job Opportunities?

Since World War II the minimum wage has been increased by steps from $.40 an hour to a current rate of $1.60 an hour. Coverage has also been expanded. There is little question that the minimum wage has had adverse effects on employment in some of the covered industries, but the evidence is mixed. The minimum wage should have the greatest effects on the employment opportunities of workers with the lowest productivity, and, especially inexperienced workers such as youth.[31] Youth also are concentrated in industries such as retail trade and services that may have been heavily affected by the minimum wage. Even if minimum wages reduce employment in covered industries, they need not cause unemployment.[32]

There are several possible ways to test for the presence of an unemployment effect of a change in the minimum wage. One naive test is to examine youth unemployment and labor force participation in the periods in which changes in the minimum wage take place. The naive model hypothesizes that an increase in the minimum will be followed by an increase in unemployment and a decline in the labor force (owing to discouragement).

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[31] It is often suggested that this has occurred in the past. See David E. Kaun, "Economics of the Minimum Wage: The Effects of the Fair Labor Standards Act, 1945-1960," unpublished thesis, Stanford University, 1964.

[32] In a competitive labor market as long as there is one sector that is not subject to a minimum wage that has a production function with elasticity of substitution of labor for capital and elasticity of demand both greater than zero, involuntary unemployment is impossible. If jobs are available and if the workers refuse them, they are voluntarily unemployed and not involuntarily unemployed. The conditions are currently satisfied in most large urban labor markets; hence, most of the unemployment that is not frictional is "voluntary," in technical jargon, but no less undesirable than "involuntary" unemployment.

A test of the naive model relates changes in labor force participation and unemployment rates for the two Octobers between which a minimum wage change occurs. This test uses data for 14 to 17 year olds classified by sex and enrollment status. Of the 24 labor force participation rate changes, 9 were in the predicted direction (Table 19). Of the 16 comparisons for the four major changes (1950, 1956, 1961, and 1963), 6 were in the predicted direction. The changes of 1960-61 occurred during a period of rising unemployment during a recession. Of the 24 unemployment changes, 11 were in the predicted direction. Of the 16 comparisons for the four major changes, 8 were in the predicted direction. The hypothesis flunks the test.[33]

A slightly more sophisticated model hypothesizes

(1) $$Uy_t = a + b_1 \, Up_t + 6_2 \, T_t + 6_2 \, S_t + E_t$$

in which Uy_t is the youth unemployment rate, Up_t is the annual average unemployment rate for white men 35 to 44 years old (a proxy for the level of excess supply of labor), T_t is a linear trend with 1948 = 0 and 1966 = 18, S_t is a shift variable equal to 1 for the years in which important increases in the minimum wage occurred in the previous 12 months (1950, 1956, 1961, and 1963), and E_t is the error term. The shift variable postulates an impact effect for the minimum wage.

The labor force participation rate model is

(2) $$ly_t = c + d_1 \, Up_t + d_2 \, T_2 + d_3 \, S_t + F_t$$

in which ly_t is the youth labor force participation rate. The hypothesized

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[33] I can only assume that Mincer suffered from eyestrain when he observed effects which he associated (in part) with minimum wages for male 14 to 17 year olds. Op. cit., p. 89.

Table 19

Year-to-Year Changes in Labor Force Participation Rates and Unemployment Rates of Youth

14 to 17, by Enrollment Status and Sex,

Periods in Which Minimum Wage Changes Occurred, 1949 to 1965

Date of Minimum Wage Change	Change from October to October of Years	Percentage point increase (+); decrease (-)							
		Labor Force Participation Rate				Unemployment Rate			
		Enrolled		Not Enrolled		Enrolled		Not Enrolled	
		Male	Female	Male	Female	Male	Female	Male	Female
January 25, 1950	1949-50	+7.4	+2.9	+2.0	+1.6	-3.0	- .3	-6.9	-2.5
March 1, 1956	1955-56	-1.0	+2.3	- .9	+2.4	+ .1	- .4	- .1	- .1
September 3, 1961	1960-61	-2.7	- .3	-4.4	-3.2	+2.6	+ .8	+ .8	-1.2
September 1963	1962-63	+1.1	+0.0	- .1	+1.8	+1.1	+2.8	+ .3	+15.1
September 1964	1963-64	- .2	+0.3	-5.4	+ .8	- .7	+ .1	- .5	-7.7
September 1965	1964-65	+3.1	+1.7	+9.4	+ .2	+1.0	-4.1	+1.4	-2.9

SOURCE: Bureau of Labor Statistics.

signs are: $b_1 > 0$; $b_2 > 0$; and $d_1 < 0$ and $d_2 < 0$. Regressions were computed for 14 to 17 year olds and 18 to 19 year olds by sex and enrollment status, or 16 groups in all (Table 20). In no instance was the minimum wage shift variable statistically significant at a conventionally desirable level. One could hardly ask a more complete rejection of the hypothesis that minimum wage changes have impact effects.

It is true, however, that the trend coefficient is highly significant in all the unemployment regressions and in six of the labor force regressions (but the three of these for enrolled youth had positive trend terms). It is not possible to infer a connection between the trend term and minimum wage effects.

In each of the two tests of the hypothesized detrimental effects of minimum wages on labor force and unemployment were rejected. I conclude that such effects have probably not occurred; or have had effects so weak as to be undetectable.

Table 20

Regressions of Youth Labor Force Participation Rates and Unemployment Rates by Age, Sex, and Enrollment Status on Prime Unemployment Rate, Trend, and Minimum Wage Shift, October, 1948-66

Sex, Age, and Enrollment Status	Regression Coefficients				R
	Intercept (1948 = 0) (c)	Unemployment Rate of White Men 35 to 44 (d_1)	Trend (d_2)	Minimum Wage Shift (d_3)	
Labor Force Participation Rate					
Male: 14-17					
1. Enrolled	26.2696	-.4611	.0084	.9742	.2366
		(.6610)	9.0952)	(1.3023)	
2. Not enrolled	89.9570	-.5770	-.9743**	-.1265	.9096
		(.8052)	(.1160)	(1.5863)	
18-19					
3. Enrolled	34.4084	-1.3137	.3577*	2.4078	.5749
		(1.0963)	(.1580)	(2.1597)	
4. Not enrolled	95.6713	-.2041	-.2481	.1613	.6649
		(.5088)	(.0733)**	(.1002)	
Female: 14-17					
5. Enrolled	15.6878	-.2159	.1408	1.0634	.5336
		(.4658)	(.0671)	(.9176)	
6. Not enrolled	53.5043	-.9988	-.6542	2.0072	.7527
		(1.0678)	(.1539)**	(2.1037)	
18-19					
7. Enrolled	15.7016	2.0663	.5165*	1.4380	.5046
		(1.4693)	(.2117)	(2.8947)	
8. Not enrolled	61.5037	-.5980	.0967	.0663	.4942
		(.4021)	(.5794)	(.7921)	

** Significant at the 0.01 level.

* Significant at the 0.05 level.

(continued)

Unemployment	(a)	(b$_1$)	(b$_2$)	(b$_3$)	
Male: 14-17					
9. Enrolled	.3446	1.1322**	.3540**	-.0138	.9561
		(.2186)	(.0315)	(.4306)	
10. Not enrolled	1.5801	3.5047**	.4899**	-.1362	.8398
		(.8394)	(.1209)	(1.6537)	
18-19					
11. Enrolled	.6613	1.2113*	.4009**	-.4448	.8634
		(.4643)	(.0669)	(.9147)	
12. Not enrolled	-.0369	3.6429**	.4285**	-.1234	.8693
		(.7031)	(.1013)	(1.3842)	
Female: 14-17					
13. Enrolled	.8073	.5812	.3282**	1.2625	.8579
		(.3908)	(.0563)	(.7700)	
14. Not enrolled	2.0222	1.8354	1.0311**	.4387	.8506
		(1.1989)	(.1727)	(2.3619)	
18-19					
15. Enrolled	2.2399	.0628	.4600**	.2533	.7988
		(.6231)	(.0898)	(1.2276)	
16. Not enrolled	.5381	1.8031**	.5008**	.1350	.9005
		(.5006)	(.0721)	(.9862)	

** Significant at the 0.01 level.

* Significant at the 0.05 level.

III. The Causes of High Unemployment

In the preceding part it was shown that young workers are characterized by high labor force mobility, high job mobility, and high occupational mobility, and that much of this movement may be desirable, and, in any event, much of it grows out of extended duration of schooling.

The high level of youth unemployment in 1966 is largely the result of this gradual and uncertain pattern of commitment. This is shown clearly for January and June, 1966 (Table 21). In January, the unemployment rate of 14 to 19 year olds was 11.8 percent, but only 3.0 percent of the youth labor force were unemployed because they had lost their jobs, and an additional 1.8 percent were unemployed because they had left their jobs voluntarily. Reentry to the labor force was the occasion for unemployment of 2.4 percent of the labor force, and new entrance was the occasion for 4.5 percent. Thus three-fifths of youth unemployment arose from entry and reentry in January, 1966. The labor force rate increased according to the regular seasonal pattern from 31.0 percent in January to 47.8 percent in June, and the unemployment rate consequently rose to 18.5 percent. More than one-half of this unemployment was attributable to new entry and about seven-eighths of unemployment in June arose from entry and reentry. Very similar results are observed for a few months in 1964 and 1965 which are published in the same place.[34]

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[34] Kathryn D. Hoyle, "Why the Unemployed Looked for Work," Special Labor Force Report, No. 78, Bureau of Labor Statistics, 1967, Table 1, p.34, and Table 2, p. 35.

Table 21

Unemployment Rates of Persons 14-19 by Reason for Unemployment, January and June, 1966

	Total Unemployment	Job Loser	Job Leaver	Reentrant	New Entrant
Rate					
January	11.8	3.0	1.8	2.4	4.5
June	18.5	1.2	1.0	5.8	10.5
Percent of Total					
January	100.0	25.5	15.3	20.7	38.4
June	100.0	6.6	5.3	31.5	56.5

SOURCE: Kathryn D. Hoyle, "Why the Unemployed Looked for Work," Special Labor Force Report No. 78, Bureau of Labor Statistics, 1967, Table 1, p. 34, and Table 2, p. 35.

The role of inexperience or new entry into the labor force is shown quite clearly in the much lower unemployment rates of the experienced teenage workers (Table 22). For experienced boys 16 to 19 years old the rate is 7.4 percent, contrasted to a total youth rate of 11.7 percent. The ratio of the experienced to the total rates for the various age-sex groups shows how important new entry is for teenagers in contrast to most other age and sex groups. Thus almost one-half of the unemployment of youth in 1966 was experienced by job seekers who had never before held a job. As shown above, reentry accounts for much of the unemployment of experienced youth.

Experienced youth are concentrated in those occupations that characteristically have high unemployment rates, such as laborers, service workers, and operatives, and this is related to the relatively high rate of unemployment among experienced youth. Even within occupation groups, however, youth unemployment rates are higher than for older groups. For instance, in 1966, the unemployment rate for "experienced" male laborers 16 to 19 was 9.8 percent compared to 7.3 percent for all ages, and for "experienced" young professional and technical workers was 3.9 percent compared to 1.0 percent for all ages.[35] Much of this higher occupational unemployment is attributable to re-entry by youth.

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[35] Bureau of Labor Statistics, Handbook of Labor Statistics, 1967.

Table 22

Unemployment Rates of Experienced Workers, by Age and Sex, 1966

	Age in years					
	16-19	20-24	25-44	45 and Over	All Age Groups	16-19 as Percent of Total
Male						
Experienced workers	259	195	454	440	1347	19.2
Never worked	173	26	3	2	204	84.8
Total unemployed	432	221	457	442	1551	27.9
Experienced unemployed as percent of total	60.0	88.2	99.3	99.5	86.8	--
Female						
Experienced workers	202	190	385	277	1054	19.2
Never worked	202	34	23	9	270	74.8
Total unemployed	404	224	408	286	1324	30.5
Experienced unemployed as percent of total	50.0	84.8	94.4	96.9	76.6	--
Unemployment Rate						
Experienced unemployment rate[1]	7.4	4.1	2.2	2.3	2.8	--
Total unemployment rate	11.7	4.6	2.2	2.3	3.2	--
Experienced unemployed as percent of civilian labor force	7.0	4.0	2.2	2.3	2.8	--
Never worked as percent of civilian labor force	4.7	.5	.1	0.0	.4	--
Female						
Experienced unemployment rate	7.6	5.3	3.8	2.6	3.9	--
Total unemployment rate	14.1	6.2	4.0	2.7	4.8	--
Experienced unemployed as percent of civilian labor force	7.0	5.3	3.8	2.6	3.9	--
Never worked as percent of civilian labor force	7.0	.9	.2	.1	1.0	--

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1. As percent of experienced civilian labor force in group.

SOURCE: Bureau of Labor Statistics

If the new entrants and reentrants are excluded from the labor force and unemployment, the unemployment rate of the "permanent" youth labor force in 1966 would range between about 5 percent in January and 2.5 percent in June. These are not "high" rates of unemployment.

The unemployment that new entrants and reentrants experience is predominantly frictional, in that it does not result from a permanent or persistent mismatch of characteristics between jobs and job seekers, as is necessary for "structural unemployment" by almost any of the currently used definitions. For most school leavers, the duration of the job search before a job is found is only a few weeks. When the seasonal unemployment resulting from reentry and the frictional unemployment resulting from labor force turnover during the school year is added in, the result is a very high level of frictional unemployment.

It is hard to see how very many of the unemployed youth can be considered "structurally unemployed" because there are relatively few long-term unemployed youth and very few "discouraged youth" who are not also enrolled in school.

IV. Rising Youth Unemployment

There are several ways of defining "rising youth unemployment." First, a rise in the ratio of youth unemployment rate to the total unemployment rate is taken to indicate a relative rise in youth unemployment. Second, a rising proportion of total employment made up of youth is taken to indicate a relative rise in youth unemployment. Third, and perhaps most commonly today, a linear regression of youth unemployment rates on a reference unemployment rate and various trend or shift variables may be computed, and positive trend be taken to indicate a rise in relative youth unemployment.[36]

Using the first, or ratio criterion, it can be concluded that the youth unemployment rate did not increase significantly as a proportion of the total unemployment rate until 1963, when the ratio began to increase above accustomed levels. From 1962 to 1967 the ratio increased from 2.7 to 3.4 (Table 23). A similar conclusion is reached using the second criterion, proportion of total unemployment. The proportion was close to customary levels until 1963. From 1962 to 1967, the proportion increased from 18.4 percent of the total to 28.2 percent. Using the third criterion, regression estimates, on youth unemployment rates for detailed age, sex, and color groups, it is concluded that inclusion of a simple linear trend improves the proportion of variance explained for the 16 to 17 and 18 to 19 year olds.

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36. Some examples of this approach are: H. Folk, Private Pensions and Manpower Policy, Bureau of Labor Statistics Bulletin 1359, Washington: Government Printing Office, 1963, p. 21; Vladimir Stoikov, "Increasing Structural Unemployment- Reexamined," Industrial and Labor Relations Review, Vol. 19 (October, 1965), pp. 368-76; Barbara Bergmann and David Kaun, Structural Unemployment in the United States (Washington: Economic Development Administration, 1966); and Eleanor Gilpatrick, Structural Unemployment and Aggregate Demand (Baltimore: Johns Hopkins Press, 1966).

Table 23

Youth 16 to 19 Years Old as Percentages of Civilian Labor Force Employment, and Unemployment, and Ratio of Youth Unemployment Rate to Total Unemployment Rate,

1947-67

	Youth 16-19 Years Old in Status as Percent of Total			Ratio of Youth 16-19 Unemployment to Total 16-19
Year	Civilian Labor Force	Employment	Unemployment	
1947	7.3	6.9	17.9	2.5
1948	7.3	6.9	18.4	2.4
1949	7.0	6.4	15.8	2.3
1950	6.8	6.3	15.6	2.3
1951	6.6	6.3	16.4	2.5
1952	6.5	6.2	18.3	2.8
1953	6.4	6.1	16.7	2.6
1954	6.2	5.8	14.2	2.3
1955	6.3	5.9	15.8	2.5
1956	6.5	6.0	17.4	2.7
1957	6.4	5.9	17.3	2.7
1958	6.4	5.7	14.7	2.3
1959	6.6	5.9	17.5	2.7
1960	7.0	6.3	18.5	2.7
1961	7.0	6.2	17.6	2.5
1962	7.0	6.3	18.4	2.7
1963	7.2	6.3	21.7	3.0
1964	7.4	6.5	23.0	3.1
1965	7.9	7.1	26.0	3.3
1966	8.7	7.8	29.1	3.3
1967	8.4	7.6	28.2	3.4

SOURCE: Bureau of Labor Statistics.

This means that the youth unemployment variable is more closely associated with the reference unemployment rate if a positive (or upward) shift of the regression line by the amount of the trend coefficient occurs each year.[37] It will be observed that positive and significant trends are observed for all six of the age, sex, and color groups except for men aged 20 to 24 years old (Table 24). I take this as evidence of a rise in the unemployment rate of youth 16 to 19 years old taking account of variation in the unemployment rate of white males aged 35 to 44 years old, the age and sex group with the lowest unemployment rates. The trend terms decrease with increasing age in each color and sex group, and are higher for females and for nonwhites. This suggests a relative worsening of unemployment for younger groups, the nonwhite, and females.

The pattern of change in unemployment rates shown above suggests two requisites for an adequate theory of increasing youth unemployment: (1) it must explain the jump in rates (and other measures) in 1962; and (2) it must explain the differential shifts in the rates of the various age, sex, and color groups.

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37. It is necessary to use a reference rate (in our case the unemployment rate of white men 35 to 44 years old, which is consistently the lowest rate of any age-color-sex group) rather than the total unemployment rate in order to avoid biased estimates of regression and correlation coefficients that would result if a part was regressed against the whole.

Table 24

Regressions of Youth Unemployment Rates, 1948-1966, on the Prime Unemployment Rate and Trend

Unemployment Rate of		Intercept	On Unemployment Rate of White Males 35-44		On Time (1948 = 0)		R
			Coefficient	Standard Error	Coefficient	Standard Error	
MALE:	White						
(1)	16-17	7.9336	1.9330**	.5491	--	--	.6493
		5.6992	1.8528**	.3227	.2730**	.0473	.9013
(2)	18-19	2.8754	3.1149**	.3506	--	--	.0971
		1.5408	3.0670**	.2314	.1631**	.0339	.9631
(3)	20-24	.0760	2.5674**	.1596	--	--	.9687
		.0104	2.5650**	.1641	.0080	.0241	.9689
	Nonwhite						
(4)	16-17	6.0164	4.4638*	1.8854	--	--	.4980
		-2.8040	4.1471**	.6370	1.0778**	.0934	.9588
(5)	18-19	5.7908	4.5715**	1.4942	--	--	.5959
		- .4911	4.3459**	..8143	.7676**	.1194	.9056
(6)	20-24	1.9544	3.8592**	.4313	--	--	.9082
		1.6824	3.8495**	.4414	.0332	.0647	.9098

* Significant at 0.05 level of significance.
** Significant at 0.01 level of significance.

FEMALE:	White						
(7)	16-17	3.3981	3.4326**	.5565	--	--	.8167
		1.9715	2.6642**	.3409	.4124**	.0652	.9469
(8)	18-19	2.2217	2.6751**	.4643	--	--	.7975
		.9745	2.0033**	.2517	.3606**	.0482	.9547
(9)	20-24	.9311	1.7888**	.1831	--	--	.9132
		.4356	1.5219**	.0969	.1433**	.0185	.9806
	Nonwhite						
(10)	16-17	14.2680	3.1820	2.7858	--	--	.2670
		1.8241	2.7352*	1.2398	1.5206**	.1818	.9095
(11)	18-19	15.0088	2.8567	1.9007			.3425
		6.3741	2.5466**	.7800	1.0551**	.1143	.9276
(12)	20-24	5.9337	2.8648**	.8477	--	--	.6339
		2.6961	2.7485**	.5566	.3956**	.0816	.8705

* Significant at 0.05 level of significance.
** Significant at 0.01 level of significance.

Demand

The problem may be treated in terms of demand and supply. The demand for labor as a whole increased secularly over the last few years and demand for youth increased even faster, because youth employment increased more than total employment in the period. In nearly all occupation and industry groups on which data is available the proportion of the total employment made up of youth increased (see Tables 25 and 26). This suggests that there were no rigid and impenetrable barriers preventing substituting of youth for older workers. Increased youth percentages were most noticeable in retail trade, private households, and laborers' occupations. Youth, of course, tend to be concentrated in the least rapidly growing occupations (Table 27). As a result, even though their percentage of total employment in each group increased, the resulting increase in youth employment (or demand) was not as fast as the growth of the youth labor force. It does not appear possible to place all of the blame on inadequate numbers of jobs. Considerable increases in youth employment took place, but obviously they were inadequate. In view of the enormous growth of the youth labor force and its rather specialized qualifications in terms of available hours of work, mobility, and experience it is hardly surprising that the demand increase was insufficient. It must be noted that there is no evidence that youth were squeezed out of their traditional jobs. Quite the contrary, they apparently took over jobs that had not previously been open to them.

We conclude, then, that demand for youth labor has not expanded as rapidly as would have been necessary to prevent youth unemployment from rising. Nevertheless, the increase in youth employment has been extraordinarily rapid, and despite the exceptionally rapid growth of the youth labor force after 1962, employment expanded very rapidly. Finally, the pattern of increased

Table 25

Workers 14 to 19 Years Old as Percent of Total Employment by Major Occupation Group, 1959 and 1965

	Youth as Percent of Total						Total Employment		
	Both Sexes		Male		Female				
Major Occupation Group	1959	1965	1959	1965	1959	1965	1959	1965	Percent Change 1958-65
All Occupations	7.3	8.5	4.3	5.0	3.0	3.5	65,581	72,165	10.0
Professional, technical and kindred workers	1.7	1.6	0.8	0.8	0.9	0.9	7,143	8,883	24.4
Farmers and farm managers	1.0	1.0	1.0	0.9	0.0+	0.1	3,019	2,244	-25.7
Managers, officials, and proprietors	0.4	0.5	0.3	0.4	0.1	0.1	6,935	7,340	5.8
Clerical and kindred workers	9.4	10.0	2.2	2.5	7.2	7.5	9,326	11,166	19.7
Sales workers	13.0	14.1	8.2	8.9	4.8	5.2	4.394	4,715	7.3
Craftsmen, foremen, and kindred workers	1.7	2.1	1.6	2.0	0.1	0.1	8,561	9,221	7.7
Operatives and kindred workers	6.1	7.3	4.9	5.8	1.2	1.5	11,858	13,390	12.9
Private household workers	20.6	29.2	0.7	1.2	19.9	28.0	2,197	2,251	2.5
Service workers except private household	9.7	12.0	4.9	6.3	4.8	5.7	5,843	7,091	21.4
Farm laborers and foremen	28.9	29.2	23.6	24.4	5.3	4.8	2,565	2,021	-21.
Laborers except farm and mine	14.5	23.0	14.2	22.5	0.3	0.5	3,743	3,855	3

SOURCE: Bureau of Labor Statistics, Special Labor Force Report, No. 69, Table C-8, p. A-23, and No.4, Table C-8, p. A-23.

Table 26

Workers 14 to 19 Years Old as Percent of Total Employment by Major Industry Group, 1959 and 1965

Industry	Youth as percent of total					
	Both sexes		Male		Female	
	1959	1965	1959	1965	1959	1965
Forestry, fisheries, mining	2.6	3.6	2.4	3.4	0.2	0.2
Construction	4.1	4.7	3.9	4.4	0.2	0.2
Manufacturing	4.3	5.2	2.8	3.7	1.5	1.5
Transportation, communications and public utilities	3.0	3.6	1.5	1.8	0.4	1.8
Wholesale and retail trade	11.1	13.9	7.0	9.2	4.1	4.7
Wholesale trade	3.9	4.5	2.5	3.1	1.4	1.4
Retail trade	12.9	15.9	8.2	10.5	4.7	5.4
Services and finance	8.3	9.9	2.9	3.5	5.4	6.4
Finance, insurance, and real estate	6.5	6.4	1.2	1.3	5.3	5.1
Business and repair services	5.4	7.8	4.1	5.8	1.3	2.0
Private households	21.8	31.8	4.8	7.4	17.0	24.4
Personal services (except private household)	5.9	7.8	2.8	3.4	3.1	4.4
Entertainment	20.8	22.3	15.0	16.0	5.8	6.3
Educational services	4.2	5.2	1.8	2.4	2.4	2.8
Other professional services	4.8	5.5	1.3	1.6	3.5	3.9
Public administration	1.6	2.2	0.6	0.9	1.0	1.3
Agriculture	26.8	27.5	13.9	14.9	12.9	12.6

SOURCE: Bureau of Labor Statistics

Table 27

Employment of Youth 14 to 19 Years Old by Major Occupation Group, 1959 and 1965

Major Occupation Group	Total			Male			Female		
	1959	1965	Percentage increase	1959	1965	Percentage increase	1959	1965	Percentage increase
All occupations	4,787	6,135	28.2	2,820	3,609	28.0	1,967	2,526	28.4
Professional, technical and kindred workers	121	142	17.4	57	71	24.6	64	71	10.9
Farmers and farm managers	30	22	-26.7	30	20	-33.3	0+	2	--
Managers, officials, and proprietors	28	36	28.6	21	29	38.1	7	7	0.0
Clerical and kindred workers	876	1,116	27.4	205	279	36.1	671	837	24.7
Sales workers	571	665	16.5	360	420	16.7	211	245	16.1
Crafstmen, foremen, and kindred workers	146	193	32.2	137	184	34.3	9	9	0.0
Operatives and kindred workers	723	978	35.3	581	777	33.7	142	201	41.5
Private household workers	452	657	45.4	15	27	80.0	437	630	44.2
Service workers except private household	566	851	50.4	286	447	56.3	280	404	44.3
Farm laborers and foremen	741	590	-20.4	605	493	-18.5	136	97	-28.7
Laborers except farm and mine	543	886	63.2	532	867	63.0	11	19	72.7

SOURCE: Derived from Bureau of Labor Statistics, Special Labor Force Report, No. 69, Table C-8, p. A-23 and No. 4, Table C-8, p. A-23.

occupational and industrial penetration by youth does not reveal any sectors of particular recent difficulty for youth. This tends to refute the assertions of increased "structural unemployment" arising out of differential growth of demand among industries and occupations. It is admitted that youth are concentrated in slowly growing or shrinking occupations and industries, but without the enormous influx of youth into the labor force, it is doubtful that this would have led to rising unemployment.[38]

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[38] In a detailed cross-sectional analysis of youth employment, Edward Kalachek concludes that youth tend to be concentrated in a relatively small number of key occupations and that, when a community has a small proportion of such activities, youth tend to increase their penetration of these key activities rather than spill over into other activities. This is possible because youth constitute only a moderate proportion of total employment in key activities. He concludes that "... there is little reason for believing that the growth in job opportunities for [illegible] teenagers will be crucially limited by growth trends for teenage intensive activities." See his "Determinants of Teen Age Employment" delivered at the 1967 meetings of the Southern Economic Association (Working Paper 6803, Department of Economics, Washington University, St. Louis, March 1968).

Supply

The principal cause of rising youth unemployment during the 1960's has been the increase in labor supply. The larger groups of young job seekers crowding into the depressed labor market in the late 1950's competed for a smaller number of jobs. Unemployment rose rapidly, and the proportion of long-term unemployment also increased. The abortive recovery from the 1958 recession had little effect on the youth unemployment rate and the 1961 recession raised rates even more. The even larger labor force increments of 1962 and after made the problem even worse. Under these supply impacts youth employment expanded rapidly in the 1960's, but youth unemployment rates stayed at depression levels.

The problem was complicated by the fact that most of the growth in the labor force occurred in part-time workers (Table 28). The growth in unemployment during the period 1957 to 1964 was roughly equal between the part-time and full-time labor forces. These changes were the result primarily of growing school enrollment.

The seasonal increase in the labor force from January to June increased during the post-World War II period also, once again reflecting growing school enrollment (Table 29). The seasonal increase did not exceed 50 percent before 1955 and did not fall below 50 percent thereafter. There was no trend in the seasonal increase of youth employment, rather it reached a peak in 1961 and thereafter decreased. As a result, the seasonal increase in youth unemployment was quite high in the middle 60's.

Increased seasonality of the labor force certainly accounts for some of the increase in youth unemployment in recent years. Seasonality and part-time job seeking together impose significant constraints on the availability of young workers. In effect, the job market must provide one kind of job during the school year and another in the summer.

Table 28

Full-time and Part-time Status of Youth 14 to 19 Years Old by Employment Status, May 1957 and May 1964

Full-time or part-time	Labor force (thousands)		Percentage increase	Unemployed (thousands)		Percentage increase
	1957	1964		1957	1964	
Total	5,042	6,653	32.0	566	1,076	90.1
Full-time	2,662	2,697	1.3	449	713	58.8
Part-time	2,380	3,756	57.8	117	363	210.3

SOURCE: Robert L. Stein and Jane L. Meredith, "Unemployment Among Full-time and Part-time Workers," Special Labor Force Report, No. 45, September 1964, p. 1011.

Table 29

Seasonal Increases in Youth Labor Force, Employment, and Unemployment, 14 to 19 Years Old, 1949 to 1965

Year	Percentage increase from January to June Civilian labor force	Employment	Unemployment
1949	39.1	29.7	121.1
1950	40.9	43.6	37.0
1951	38.3	35.2	70.5
1952	45.6	44.0	62.2
1953	39.5	36.5	81.6
1954	35.3	36.1	58.2
1955	50.1	47.3	79.5
1956	52.8	44.6	127.4
1957	55.2	46.4	124.1
1958	58.6	48.1	100.7
1959	56.4	47.1	116.1
1960	65.9	53.2	147.1
1961	73.5	67.9	99.4
1962	61.9	54.1	109.4
1963	62.4	45.4	166.2
1964	62.8	49.3	140.4
1965	56.3	45.4	125.1

SOURCE: Bureau of Labor Statistics

Another result of increasing school enrollment is higher labor force turnover, with larger proportions of workers moving back and forth between "not in labor force" and "labor force" statuses. Because of this movement, unemployment associated with job search after reentry has probably increased, although the amount of this increase has not yet been measured.

The total result of these changes has been an increase in frictional unemployment associated with job changing and labor force mobility. The proportion of short-term unemployment as a percentage of total youth unemployment has grown during the period when the youth unemployment rate was rising relative to the unemployment rates of other groups. This is conclusive evidence that the mismatch between jobs and workers has not worsened. If, as shown above, the structure of unemployment among youth has changed with increasing proportions being composed of the younger, the nonwhite, and the female youth, this is not evidence of an increase in structural unemployment by any of the usual definitions. The changing structure of youth unemployment, and the changing rates of the various groups of youth, can be explained quite directly as a result of the "glut" of younger workers and of employer selectivity (or discrimination) among job seekers. The result of this is the proportionsof jobs going to youth do not equal the proportions that the groups make up of the total youth labor force. The jobs that are available are disproportionately filled by preferred groups of younger workers.

V. Outlook for Youth Unemployment

This paper is analytical in intent, but it has obvious implications for policy. If the analysis is correct, no single explanation of high or of rising youth unemployment is sufficient to explain the growth of youth unemployment in recent years. Some of the popular explanations, such as the slow growth of teenage intensive industries and occupations, increasing structural unemployment, and effects of the minimum wage do not appear to be supported by the data. The two important causes of high and rising youth unemployment seem to be the increasing frictional unemployment that is the result of the labor force behavior of enrolled youth and employer discrimination. Although it was not possible to establish the magnitudes of these causes, they seem to be consistent with the unemployment rates that have been observed in recent years. The increased frictional unemployment of youth is also a direct result of the rapid increases in the youth labor force. The glut of youth has increased unemployment rates because it is a glut of students who show high labor force turnover and, consequently, high frictional unemployment. The increase in the youth labor force has meant that at any point of time there are more youth competing for a given number of youth jobs. As a result, employers discriminate within the youth group and also gradually substitute youth for older workers. The substitution process does not work rapidly enough to prevent the unemployment rate from remaining high and does not prevent the unemployment rates of the least preferred young workers from rising relative to the unemployment rates of more preferred groups of youth.

Labor Force Forecasts

The forecast rate of growth of the youth labor force decreases in successive five year periods (Table 30). This suggests that at no time will the surge of youth into the labor force be as overwhelming as it was during the period 1960-65. A good thing, too, because this surge was the underlying cause of rising youth unemployment during the period. Nevertheless, the rate of growth during the coming years is uncomfortable enough. Even if employers have been reasonably successful in substituting youth for older workers in the past, there is no reason to expect that they can achieve the same success in the future. There are sound reasons to expect substitution to become harder, rather than easier in the future, and these include the increasing complexity of production processes, the continued shrinkage or relatively slow growth of teenage intensive industries and occupations, and the growth of large firms with rigid formal hiring systems, many of which almost automatically exclude youth under age 18 from employment.

The labor force growth will consist largely of part-time and summer workers, and a continuation of the trend toward increasing seasonality in the labor force can probably be expected. The extraordinarily large unemployment rates of the least preferred groups of workers in the last few years and the large trends in these rates create grave doubts about the capacity of the competitive labor market to provide jobs in anything like sufficient numbers to lead to a reversal of the trends. During a period when adult unemployment rates have been at rates as low as any in peacetime, the dispreferred youth groups have experienced unemployment rates that are probably somewhat higher than those of the Great Depression. While much of the higher unemployment is short term and intermittent, it is no less a problem. It will not do to exaggerate the social implications of high unemployment among school youth, but at the same time it must have its due.

Table 30

Actual and Forecast Labor Force 14 to 19 Years Old, 1960-80

Sex	Number in Thousands					Percentage Increase			
	1960[a]	1965[a]	1970[b]	1975[b]	1980[b]	1960-65[a]	1965-70[b]	1970-75[b]	1975-80[b]
Total	5,223	6,350	7,188	7,865	8,210	21.6	13.2	9.4	4.4
Male	3,162	3,831	4,280	4,664	4,824	21.2	11.7	9.0	3.4
Female	2,061	2,519	2,908	3,201	3,386	22.2	15.4	10.1	5.8

a. Actual.

b. Forecast.

SOURCE: Bureau of Labor Statistics

Implications for Policy

What, then, should be done? First, a sensible policy for youth unemployment would not attach too much importance to proposals for solving the problem through reliance on measures to increase aggregate demand. The unemployment rates of adults are low enough now to raise a question of excessive tightness in the labor markets. To the extent that the regressions of youth unemployment on prime age unemployment mean anything they suggest that there is very little mileage left in this vehicle, because the prime rate cannot go down very much farther. At the same time it must be recognized that the job of reducing youth unemployment can only be performed in a market in which there is high and rising aggregate demand. If the general unemployment rate rises significantly, the hope of decreasing youth unemployment may as well be forgotten.

Second, a sensible policy will work with the market rather than against it. Further increases in the minimum wage, for instance, cannot help the employment prospects of youth. To the extent that a higher minimum wage eliminates low paying jobs it makes the task of placing youth harder. I believe that a partial exemption from FLSA wage rates for youth would speed up the rate of substitution of youth for older workers. For instance, the legal minimum at age 16 might be 50 percent of the adult minimum and the differential for other ages up to 19 could be less than this. Thus the cost of hiring youth for low-wage employers would be reduced. This would probably have little effect in improving youth career opportunities, since in many career jobs the starting wage is far above the legal minimum wage. To induce these employers to hire youth, a system of subsidies related to the age of employees might be adopted. The subsidy (like the minimum wage exemption) would be self eliminating with respect to a single employee and would not lead to a permanent subsidy for a particular young person. To economize, of course, the subsidy could be linked to the employer's increase in youth unemployment rather than his total youth unemployment. With the slowing down of the rate of growth of the youth labor force expected in the next decade the aggregate amount of a successful subsidy program would not be large in relation to the total earnings of youth. Both the minimum wage exemption and the subsidy are simply ways of allowing the relative surplus of youth job seekers to depress relative wages. In this sense, they work as a crutch for a labor market that is only limpingly responsive to excess supply.

The third point to consider is a program of job creation. There are a very large number of socially useful activities that are not now adequately funded. Many of these activities are well within the competence of the dispreferred groups of youth. Examples are child-care centers, nursery schools, and preschool educational centers in the ghettoes. If mothers formerly on Aid to Families with Dependent Children are to be forced into the job market it might be desirable to provide places where their children can be cared for. If the centers are done well, they will need very large numbers of workers, and, with some training, many of the younger Negro girls who are now unemployed or unemployable could make useful aides for such centers. Part-time work and summer work would also be provided in the course of the seasonal demands on the center' services. Another set of opportunities for the same group of job seekers are improved services in public hospitals.

For boys, the jobs to be created could be directed toward the physical rehabilitation of the ghettoes, extra garbage collection, construction, maintenance and supervision of recreational facilities, and improved programs of housing rehabilitation in the ghettoes.

It is obvious that if the ghettoes are to be made fit places to live by public action (and I suppose we will, in fact, get rid of them one way or another) it seems logical and efficient to have a great part of the actual work done by the people who live there. Many of the most suitable people for the jobs are the unemployed youth. As was seen above, however, neither public administration or educational services employ very many youth. Obviously this could be changed, if the political and school authorities were serious about increasing the number of employed youth.